CHAPTER 10

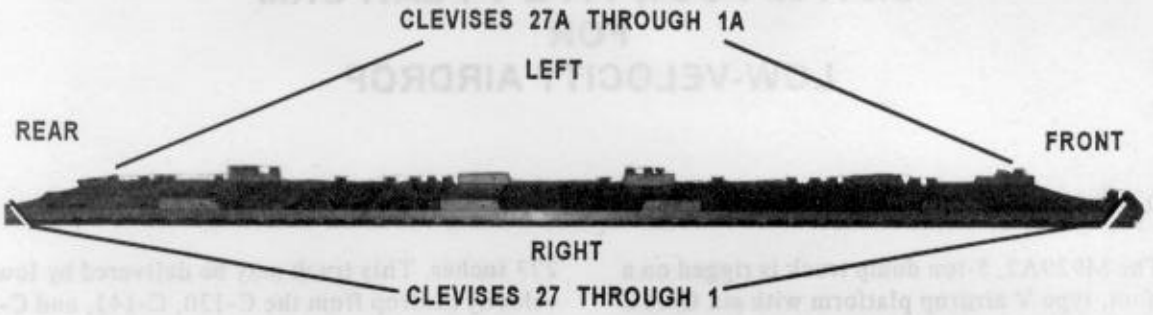
RIGGING M929A2, 5-TON DUMP TRUCK ON A 32-FOOT, TYPE V PLATFORM FOR LOW-VELOCITY AIRDROP

10-1. Description of Load

The M929A2, 5-ton dump truck is rigged on a 32-foot, type V airdrop platform with six G-11C cargo parachutes and other items of airdrop equipment. The M929A2 truck weighs 23,600 pounds reducible to 22,640 pounds. Its height is 124 1/2 inches, reducible to 93 1/2 inches. The width of the truck is 95 inches. The length of the truck is 273 inches. This truck may be delivered by low-velocity airdrop from the C-130, C-141, and C-5 aircraft.

10-2. Preparing Platform

Prepare a 32-foot, type V platform as shown in Figure 10-1.



Step:

1. Inspect, or assemble and inspect, a 32-foot, type V airdrop platform as outlined in TM 10-1670-268-20&p/TO 13C7-52-22.
2. Starting at the front of the platform, attach tandem links to bushing holes 1, 2, and 3.
3. Attach the first suspension link to bushing holes 10, 11, and 12 on each side of the platform. Attach the second suspension link to holes 26, 27, and 28 on each side of the platform. Attach the third suspension link to holes 37, 38, and 39 on each side of the platform. Attach the fourth suspension link to holes 53, 54, and 55 on each side of the platform.
4. Starting from the front of each platform side rail, attach clevises to the front tandem links using bushing holes 1 and 2.
5. Attach clevises to the second suspension links using bushings 2, 3, and 4.
6. Attach clevises to the fourth suspension links using bushings 1, 2, 3, and 4.
7. Starting at the front of both platform side rails, attach clevises to bushings 7, 8, 13, 14, 15, 17, 22, 30, 41, 42, 43, 45, 48, 57, 60, 61, 62, and 64.
8. Starting at the front of the platform side rails number the clevises attached to the right rail 1 through 27 and 1A through 27A to the left rail.

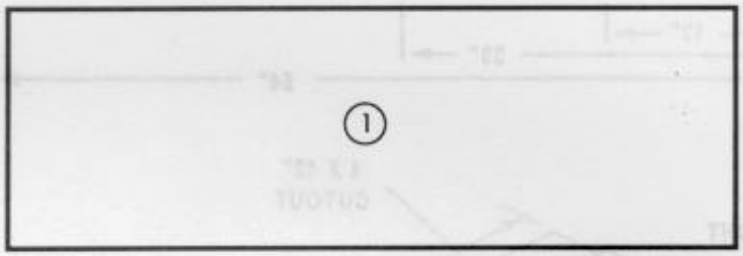
Figure 10-1. Platform prepared

10-3. Building and Positioning Honeycomb Stacks

Build and position the honeycomb stacks as described below.

a. Build the load spreaders for the honeycomb stacks as described in Figures 10-2 through 10-9.

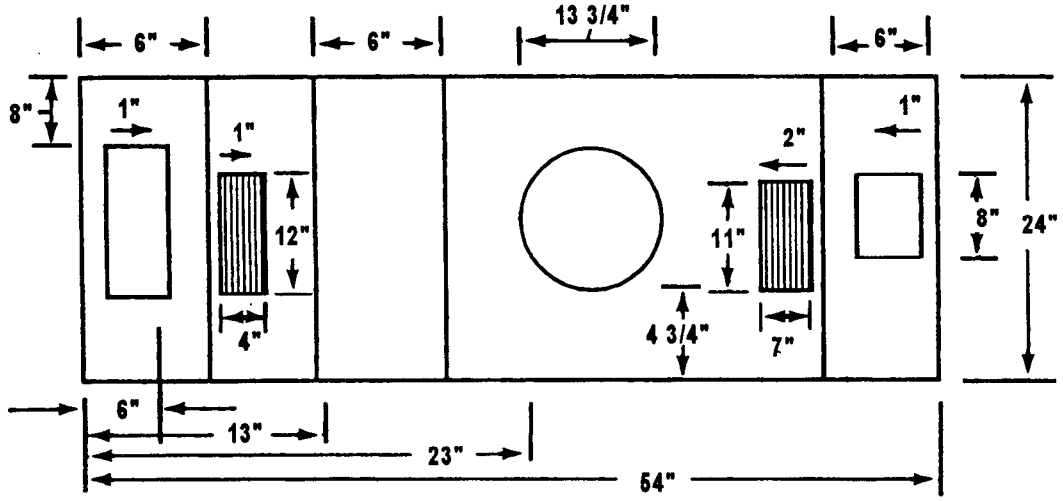
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.

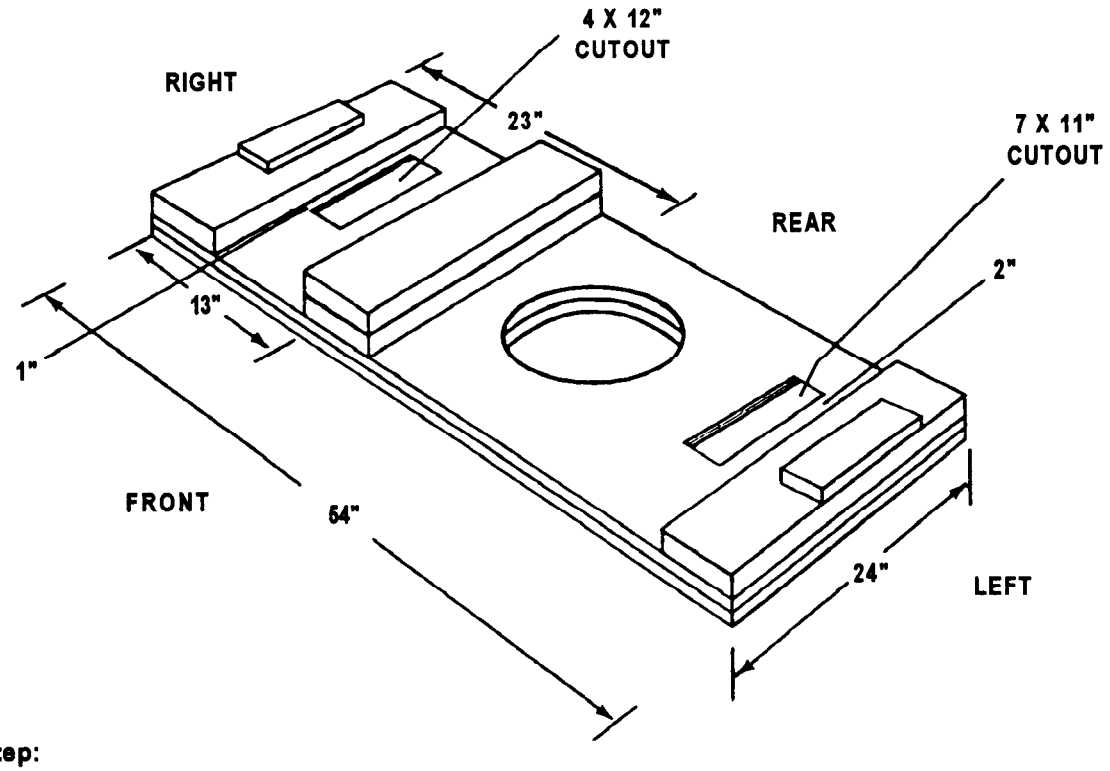


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	54	24	3/4-inch plywood
2	4	5 1/2 (actual)	24	2- by 6-inch lumber
3	2	3 1/2 (actual)	8	2- by 4-inch lumber

Figure 10-2. Material required for load spreader for honeycomb stack 2

Note: These drawings are not drawn to scale.



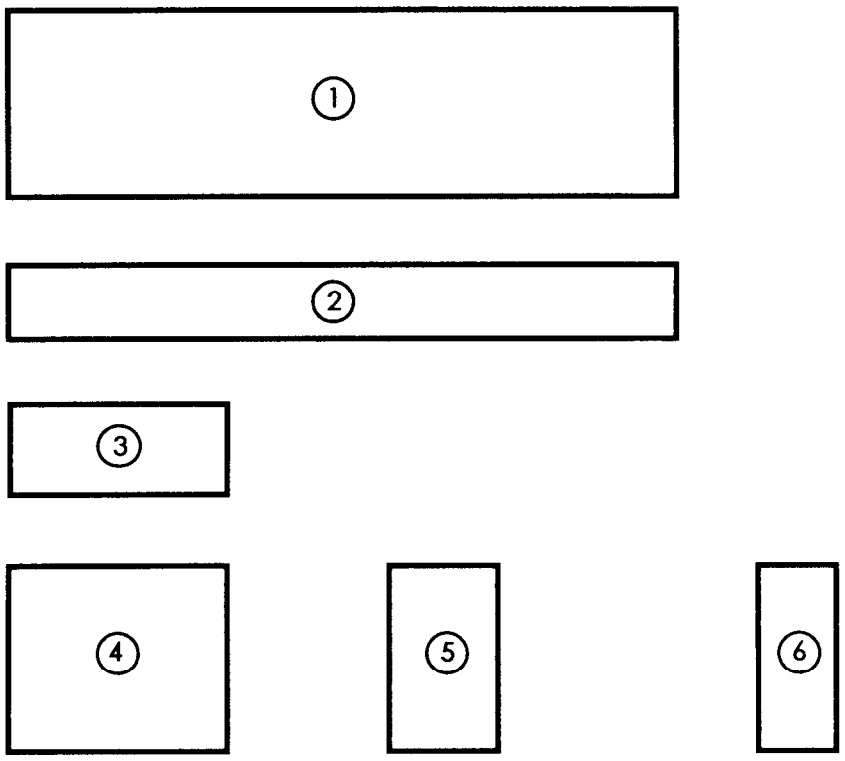


Step:

1. Construct the load spreader for honeycomb stack 2 as shown.
2. Secure the plywood and lumber in place as shown with sixteen-penny nails.

Figure 10-3. Load spreader for honeycomb stack 2 constructed

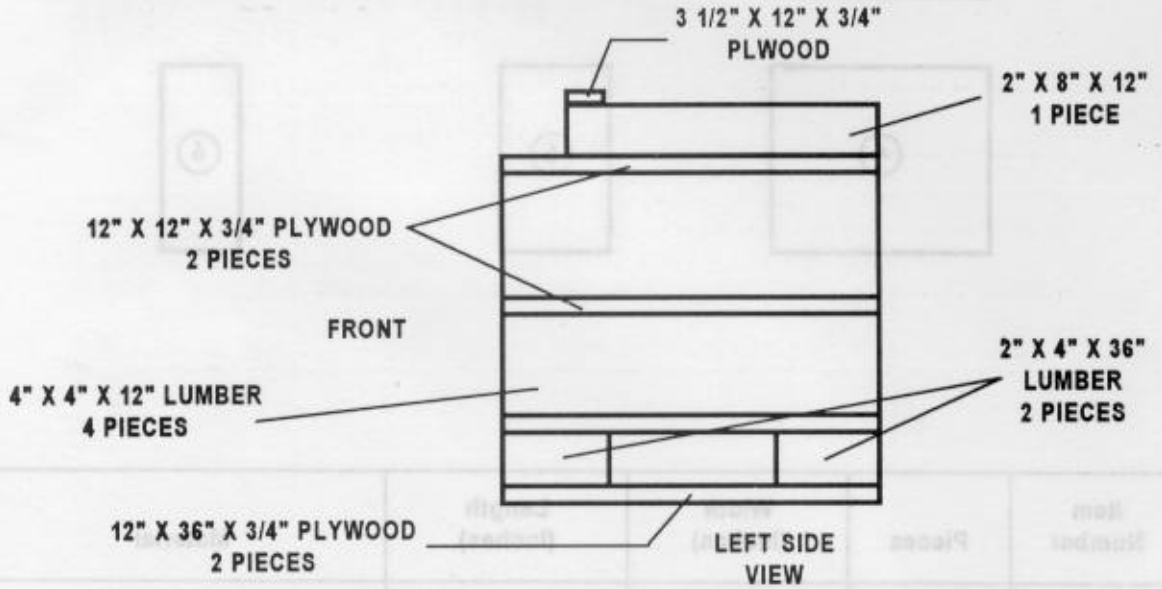
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	12	36	3/4-inch plywood
2	2	3 1/2	36	lumber (2 x 4)
3	4	3 1/2	12	lumber (4 x 4)
4	2	12	12	3/4-inch plywood
5	1	2- by 8	12	3/4-inch plywood
6	1	3 1/2	12	3/4-inch plywood

Figure 10-4. Material required for load spreader for honeycomb stack 3

Note: These drawings are not drawn to scale.



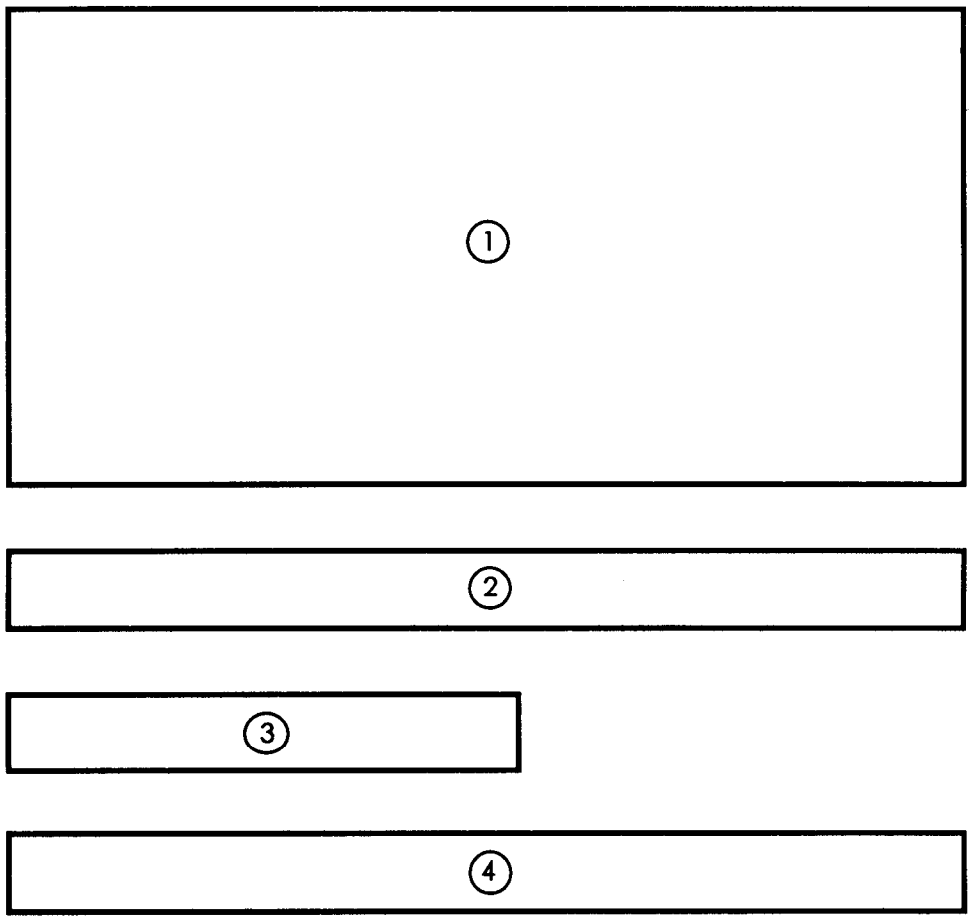
STACK-3

Step:

1. Construct the load spreader for honeycomb stack 3 as shown.
2. Secure the plywood and lumber in place as shown with eightpenny nails.

Figure 10-5. Load spreader for honeycomb stack 3 constructed

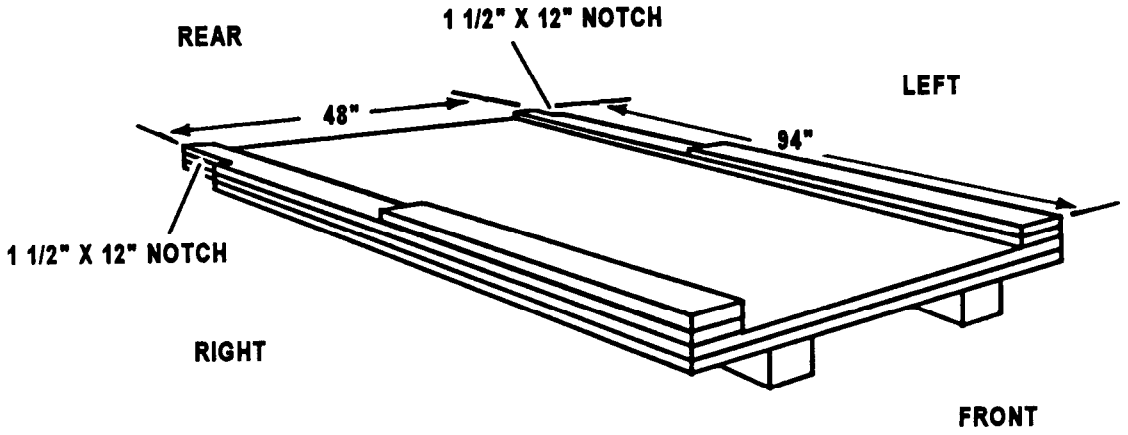
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.

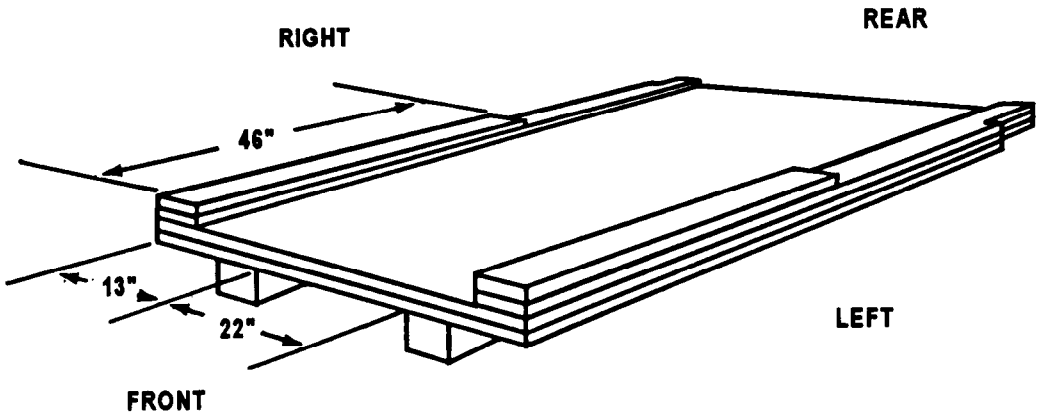


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	48	94	3/4-inch plywood
2	2	4	94	3/4-inch plywood
3	2	3 1/2 (actual)	46	2- by 4-inch lumber
4	2	3 1/2 (actual)	94	4- by 4-inch lumber

Figure 10-6. Material required for load spreader for honeycomb stack 4

Note: These drawings are not drawn to scale.



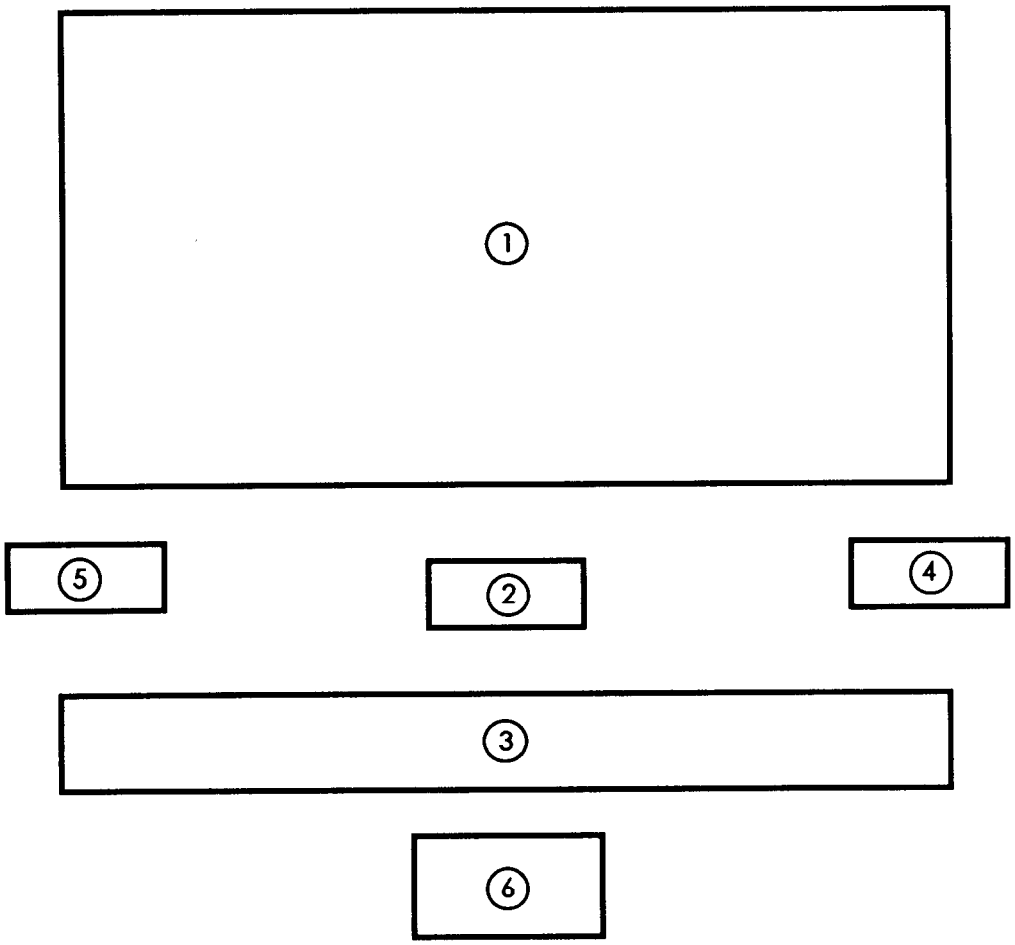


Step:

1. Construct the load spreader for honeycomb stack 4 as shown.
2. Secure the plywood and lumber in place as shown with eightpenny and sixteen-penny nails.

Figure 10-7. Load spreader for honeycomb stack 4 constructed

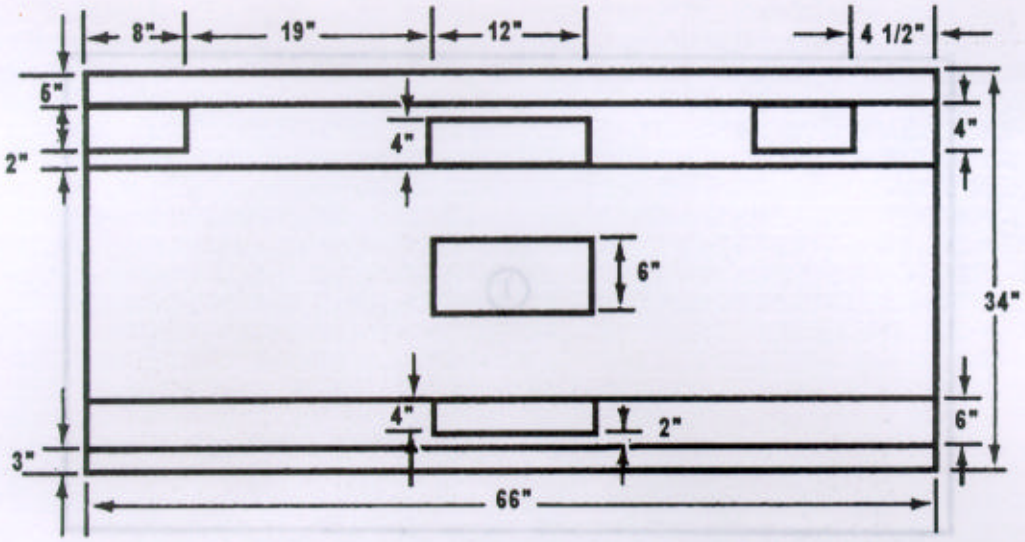
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.

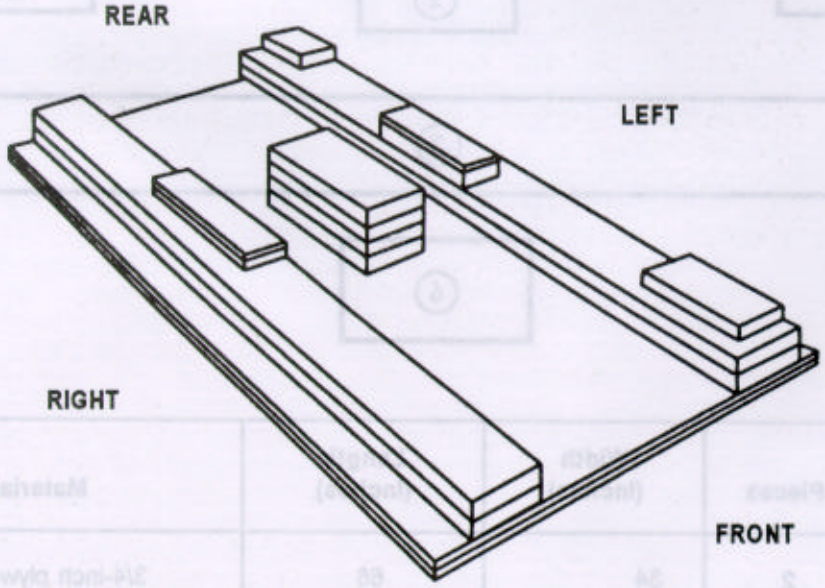


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	34	66	3/4-inch plywood
2	2	3 1/2	12	3/4-inch plywood
3	4	5 1/2 (actual)	66	2- by 6-inch lumber
4	2	5 1/2	8	2- by 6-inch lumber
5	2	3 1/2 (actual)	12	2- by 4-inch lumber
6	4	5 1/2	12	2- by 4-inch lumber

Figure 10-8. Material required for load spreader for honeycomb stack 5

Note: These drawings are not drawn to scale.



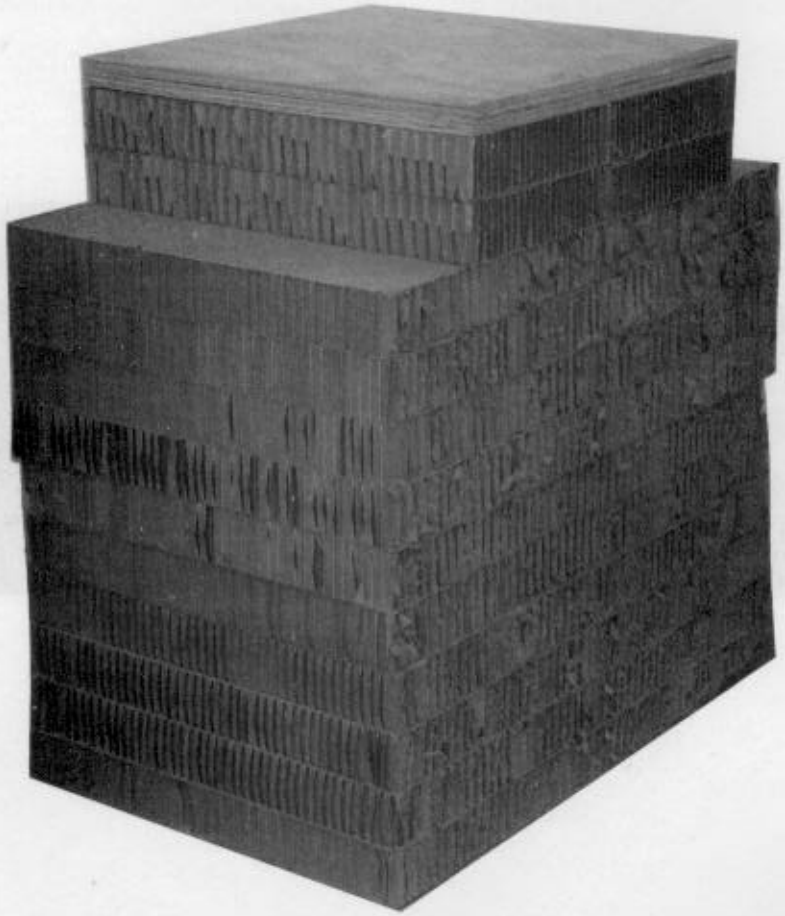


Step:

1. Construct the load spreader for honeycomb stack 5 as shown.
2. Secure the plywood and lumber in place as shown with eightpenny and sixteen-penny nails.

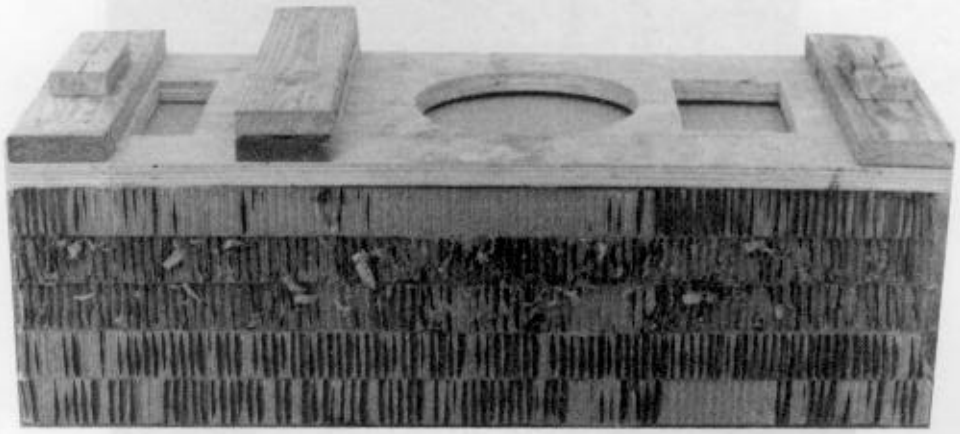
Figure 10-9. Load spreader for honeycomb stack 5 constructed

b. Build the honeycomb stacks as shown in Figures 10-10 through 10-14. Glue the layers of the honeycomb together. Do NOT glue the stacks to the platform.



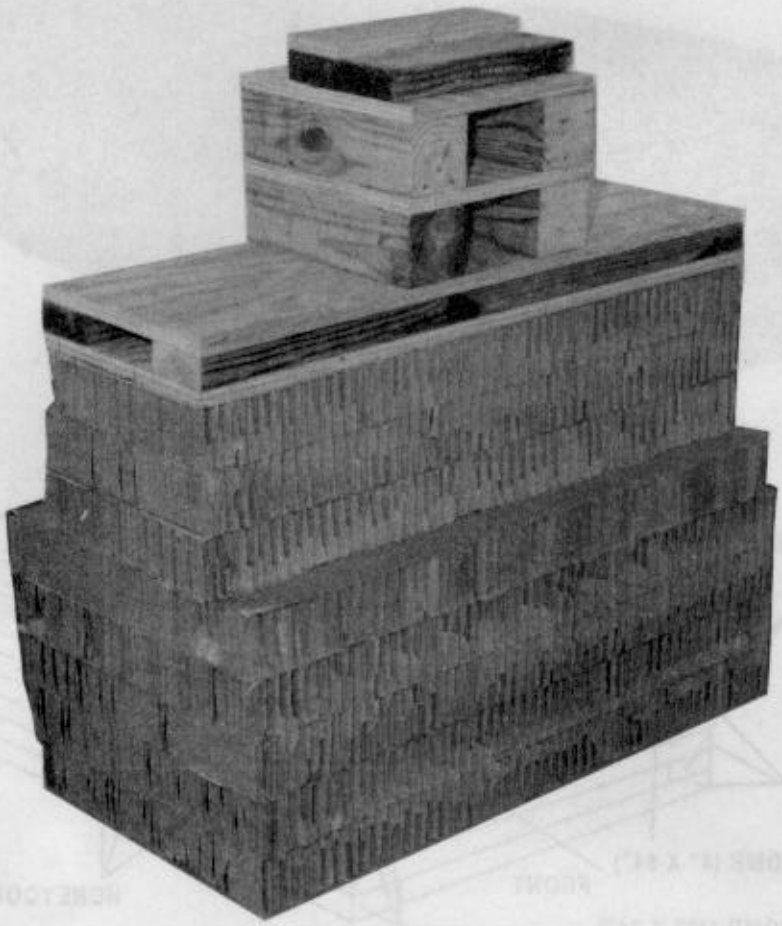
Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	10	36	24	Honeycomb	Place honeycomb as base.
	2	24	24	Honeycomb	Center honeycomb on top of base.
	2	24	24	Plywood	Center 3/4-inch plywood on top of 24- by 24-inch honeycomb.

Figure 10-10. Honeycomb stack 1 prepared



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
2	5	54	24	Honeycomb Load Spreader	Place honeycomb as base. Place load spreader on top of 54- by 24-inch honeycomb.

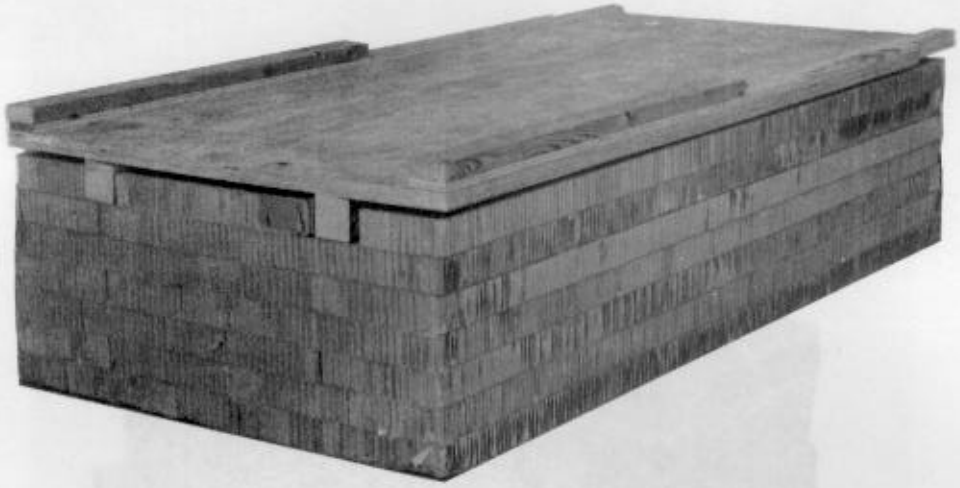
Figure 10-11. Honeycomb stack 2 prepared

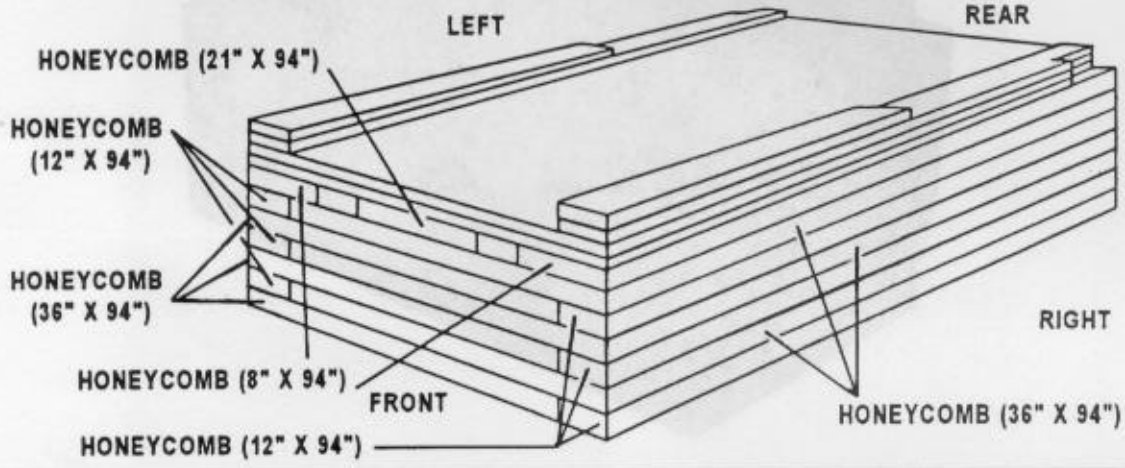


Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
3	5 3	36 36	18 12	Honeycomb Honeycomb Load Spreader	Place honeycomb as base. Place honeycomb on base. Place load spreader on top of base.

Figure 10-12. Honeycomb stack 3 prepared

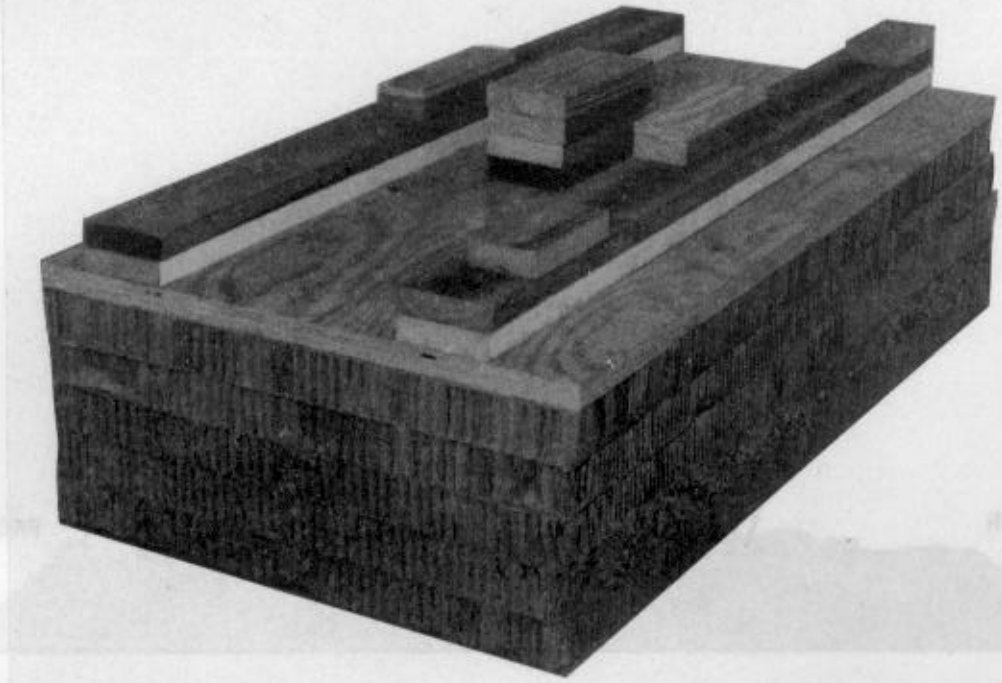
Note: This drawing is not drawn to scale.





Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
4	6	36	94	Honeycomb	Place honeycomb as base.
	6	12	94	Honeycomb	Place honeycomb as base.
	1	21	94	Honeycomb	Center honeycomb on top of base.
				Load Spreader	Place load spreader on top of base.
	2	8	94	Honeycomb	Place one piece of honeycomb on each side of base even with the 94-inch edge.

Figure 10-13. Honeycomb stack 4 prepared

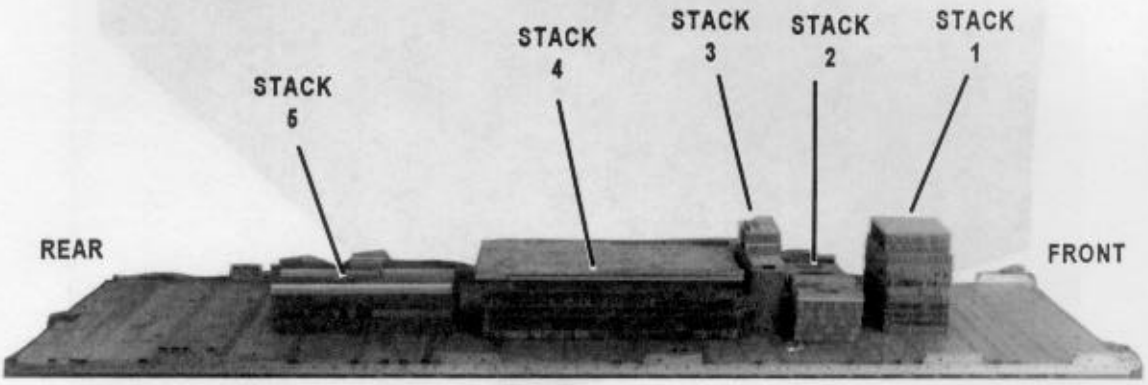


Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
5	5	34	66	Honeycomb Load Spreader	Place honeycomb as base. Place load spreader on top of base.

Figure 10-14. Honeycomb stack 5 prepared

c. Position the honeycomb stacks on the platform as shown in Figure 10-15.

Note: The honeycomb may need to be adjusted slightly when the truck is positioned on the stacks.



Stack Number	Position of Stack on Platform
1	Place stack: Centered 54 1/2 inches from the front edge of the platform.
2	Centered 9 1/2 inches from the rear of stack 1.
3	Centered flush with the rear of stack 2.
4	Centered flush against the rear of stack 3.
5	Centered 10 1/2 inches from the rear of stack 4.

Figure 10-15. Honeycomb stacks positioned on platform

10-4. Removing Truck Components

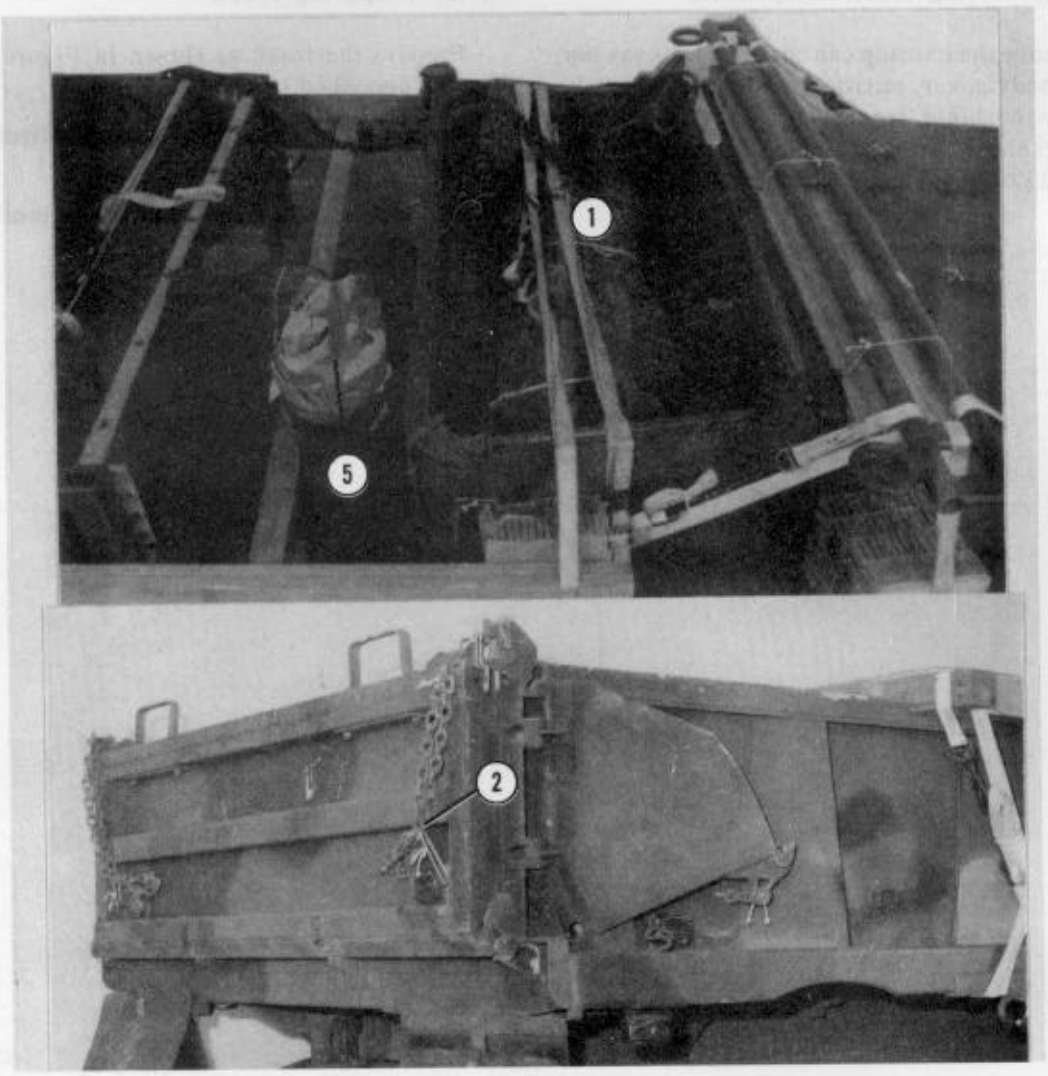
Remove the hardtop cab cover and canvas top, cargo body cover, mirror assemblies, air intake cap, windshield, spare tire and tray holder and exhaust stack assemblies according to TM 9-2320-272-10 and TM 9-2320-272-20.

10-5. Preparing Truck

Prepare the truck as shown in Figure 10-16 and as described below.

a. Reduce the tire pressure in all tires to 12 pounds psi.

b. Make sure the fuel tank is no more than 3/4 full of fuel.



(1) Store mirrors, exhaust pipe, intake cap, spare tire tray, and taped nuts and bolts in the cab cover. Place all parts on the front seat and secure with 1/2-inch tubular nylon.

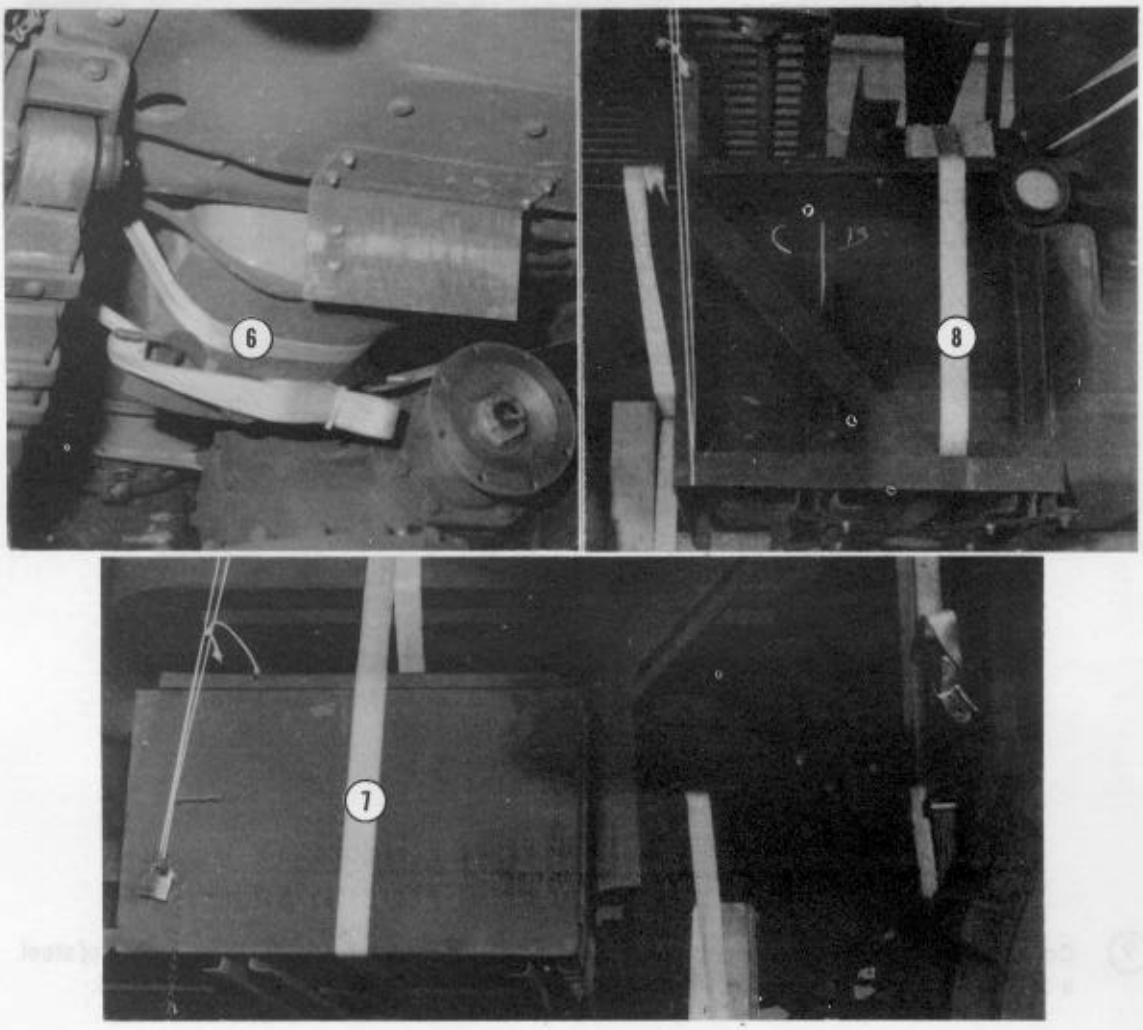
(2) Place the tail gate in the up position. Safety the tailgate with type III nylon webbing on the hinges and chains.

(3) Tie the hood shut, doors, spreading chains, dump release handle in the closed position, steering wheel, spread flaps, and hood latch bar with type III nylon cord (not shown).

(4) Tape all light bulbs and glass objects with pressure sensitive tape (not shown).

(5) Pad and tape the exhaust pipe and air intake pipe with cellulose wadding and pressure sensitive tape.

Figure 10-16. Truck prepared

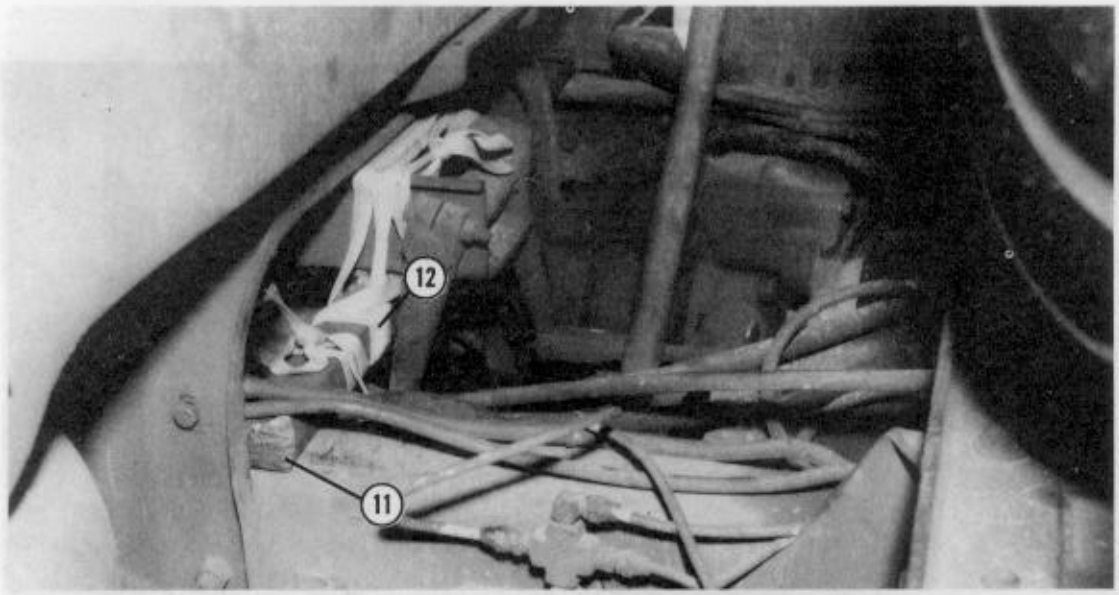


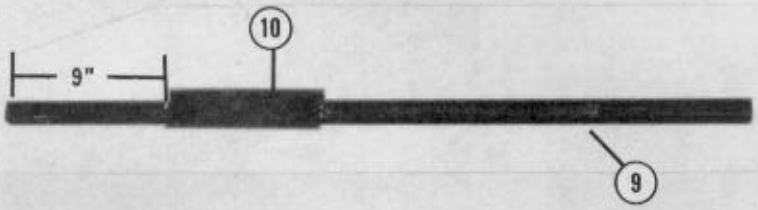
(6) Pad the front and rear of the oil pan with felt. Run a 15-foot tie-down lashing around the front and a 15-foot tie-down lashing around the rear of the oil pan and main frame. Secure both lashings with D-rings and loadbinders.

(7) Secure the ovm box and the air cleaner assembly by running a 45-foot tie-down lashing around the ovm box and the air cleaner, up and across both cab doors. Secure the lashing in the cab of the truck with a D-ring and a loadbinder.

(8) Secure each fuel tank with a 15-foot tie-down assembly and cellulose wadding (not shown).

Figure 10-16. Truck prepared (continued)





(9) Construct the components of a cab support bar using a 7/16- by 1 1/2- by 7 1/8-inch piece of steel, a 3/4- by 1 1/2- by 34-inch piece of steel, and a 7/16- by 1 1/2- by 34-inch piece of steel.

Note: The 34-inch piece of steel must be 1 3/16-inch thick. A single piece or a combination of pieces may be used to get the correct thickness. The unit will supply this item.

(10) Weld the pieces of steel together as shown.

(11) Slide the bar in place with the 7 1/8-inch piece of steel up and with one end of the bar over each mainframe rail and the bar under the transfer link assembly support. The 7 1/8-inch metal plate must be closest to the left side of the truck.

Note: The bar must be positioned from the right side of the truck.

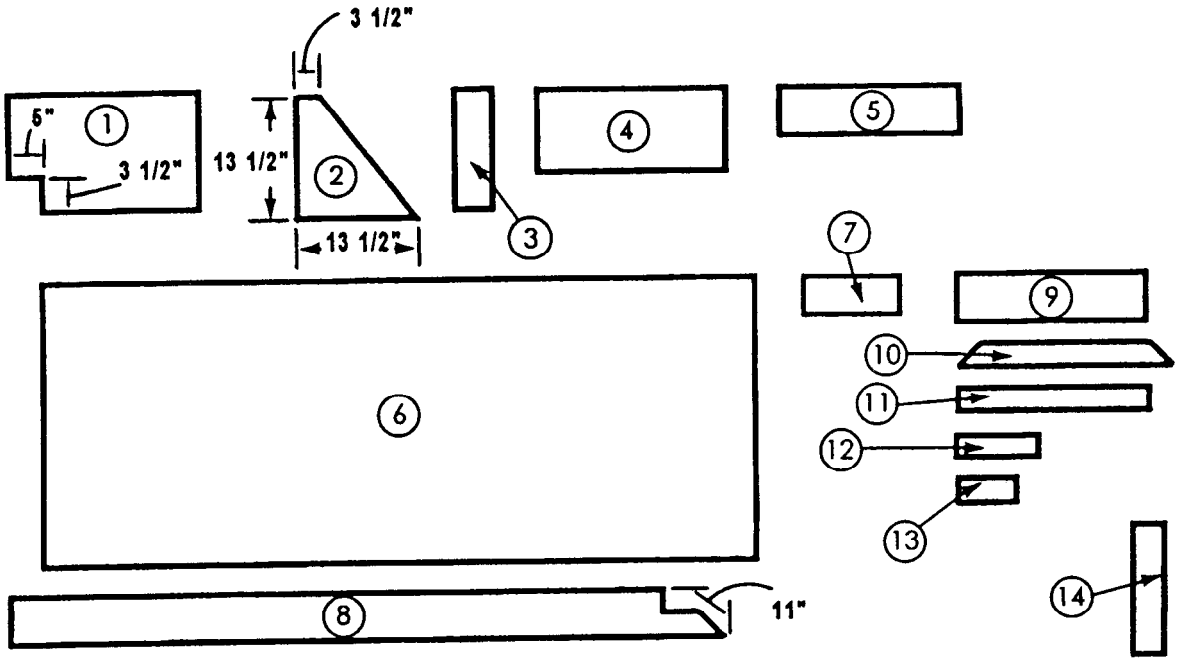
(12) Tie each end of the bar securely in place with several turns of 1/2-inch tubular nylon webbing.

Figure 10-16. Truck prepared (continued)

10-6. Building and Installing Frame Support

Use the material in Figure 10-17 to build the frame support. Build the frame support as shown in Figure 10-18. Install the frame support as shown in Figure 10-19.

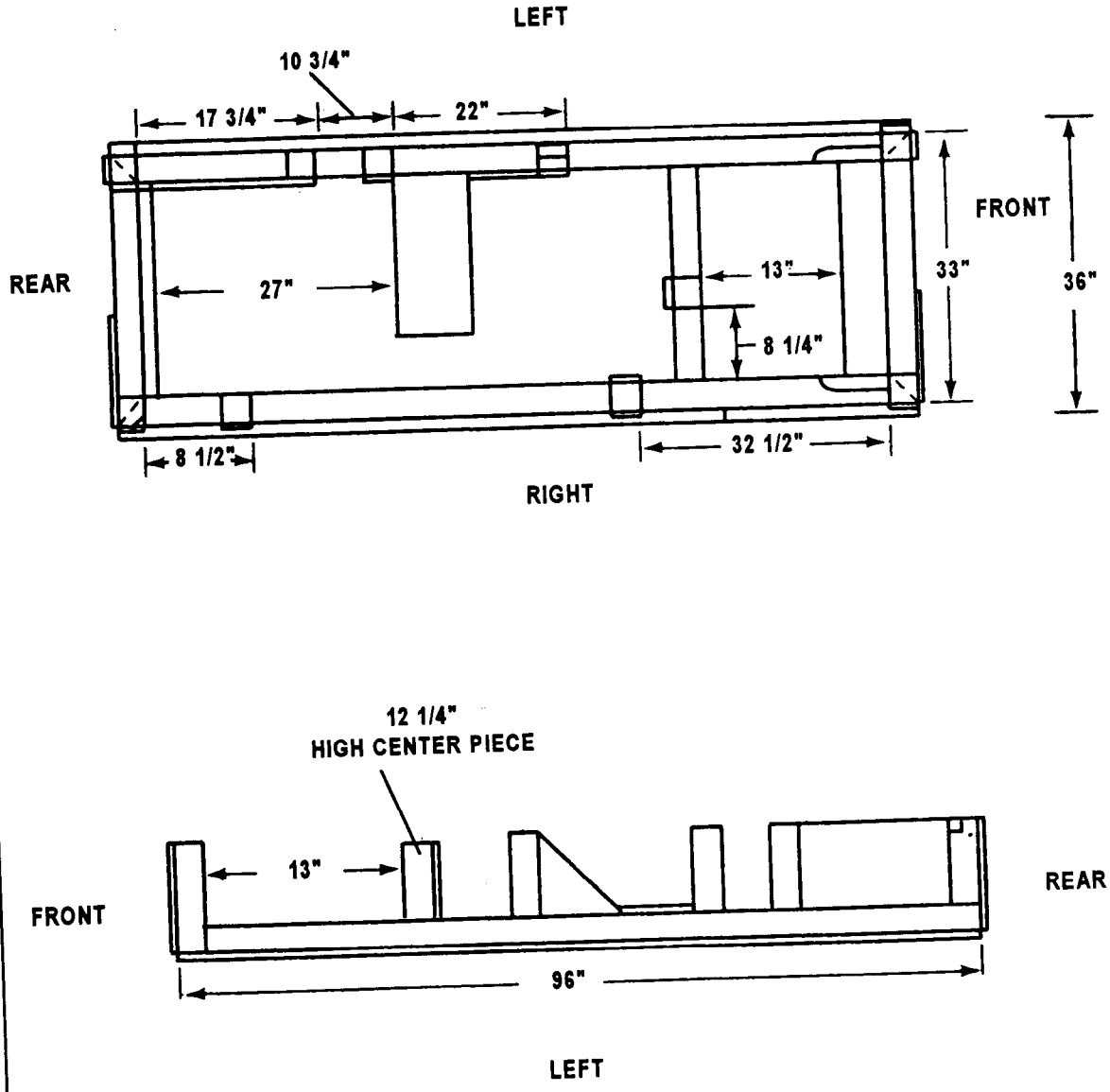
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	13 1/2	21 1/2	3/4-inch plywood
2	3	13 1/2	13 1/2	3/4-inch plywood
3	9	3 1/2	13 1/2	3/4-inch plywood
4	1	8 1/2	20	3/4-inch plywood
5	2	3 1/2 (actual)	20	2- by 4-inch lumber
6	1	36	96	3/4-inch plywood
7	2	3 1/2 (actual)	10 1/4	2- by 4-inch lumber
8	2	3 1/2 (actual)	96	4- by 4-inch lumber
9	1	5 1/2 (actual)	26	2- by 6-inch lumber
10	2	3 1/2 (actual)	26	4- by 4-inch lumber
11	2	3 1/2 (actual)	26	2- by 4-inch lumber
12	1	3 1/2 (actual)	12 1/4	4- by 4-inch lumber
13	8	3 1/2 (actual)	12 1/4	4- by 4-inch lumber
14	1	3 1/2	13 3/4	3/4-inch plywood

Figure 10-17. Material required for frame support

Note: These drawings are not drawn to scale.

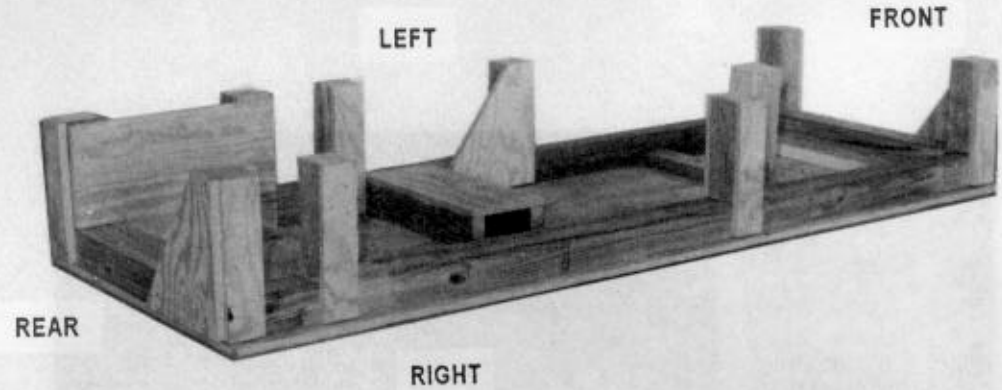


Step:

1. Construct the frame support as shown.
2. Secure the plywood and lumber in place as shown with eightpenny and sixteen-penny nails.

Figure 10-18. Frame support constructed

Note: This drawing is not drawn to scale.



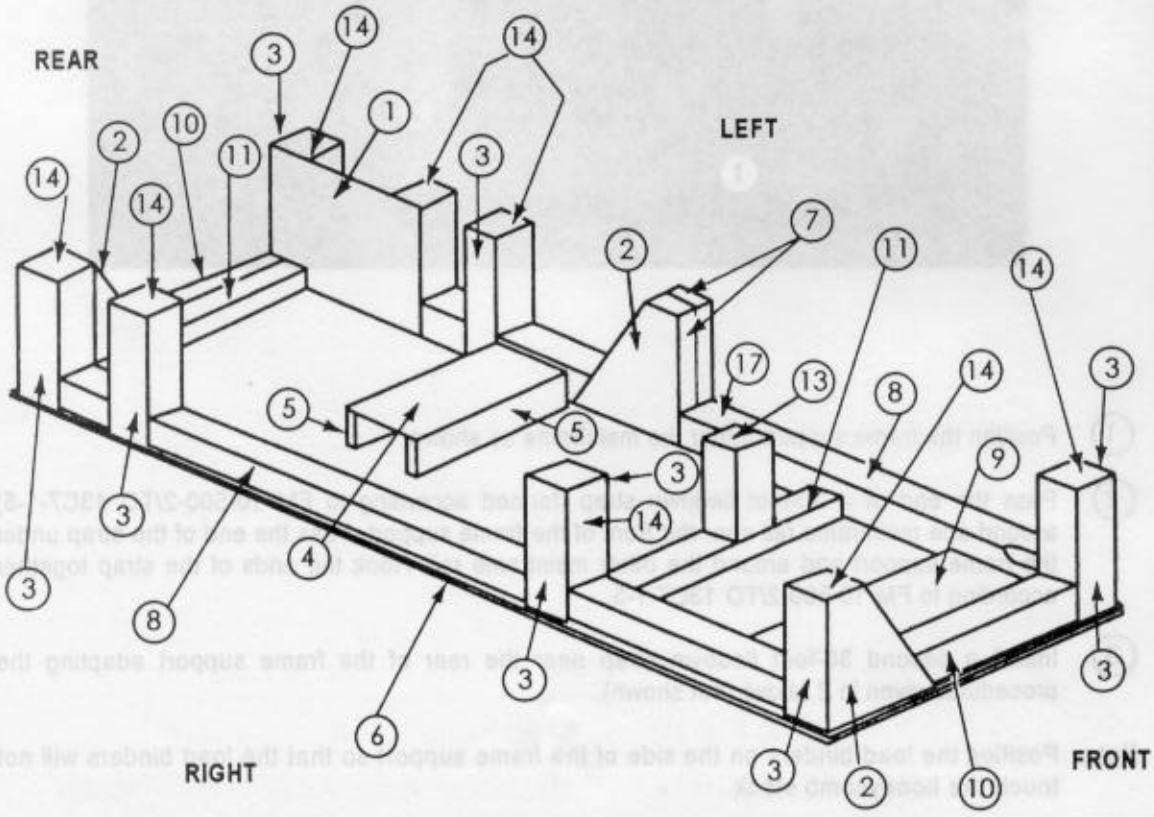
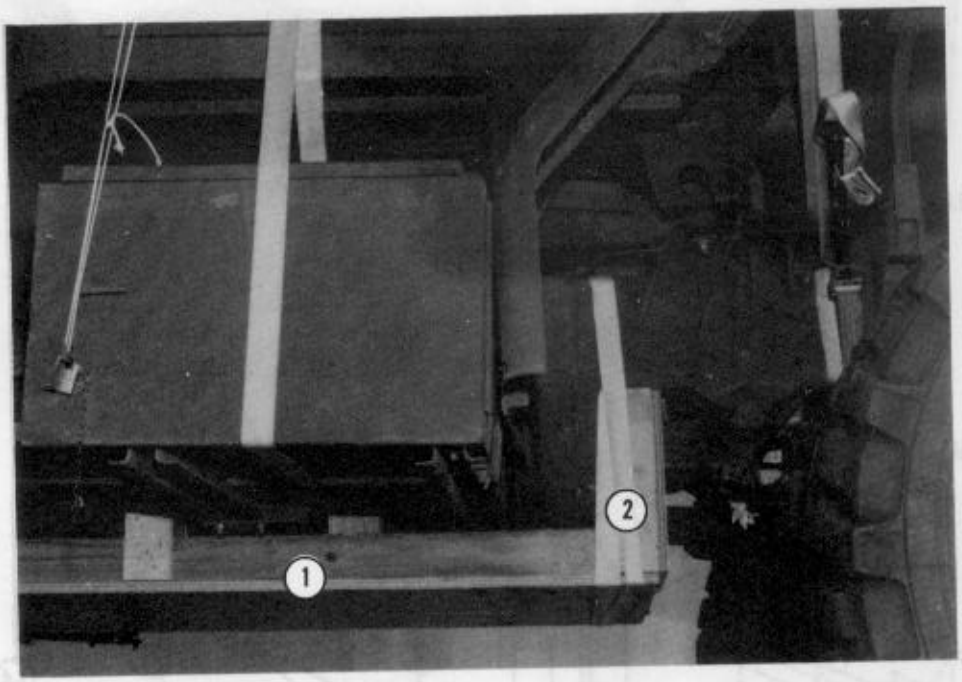


Figure 10-18. Frame support constructed (continued)

CAUTION
Ensure the frame support is not placed on hydraulic lines.



(1) Position the frame support under the mainframe as shown.

(2) Pass the end of a 30-foot tiedown strap (formed according to FM 10-500-2/TO 13C7-1-5) around one mainframe rail near the front of the frame support. Pass the end of the strap under the frame support and around the other mainframe rail. Hook the ends of the strap together according to FM 10-500-2/TO 13C7-1-5.

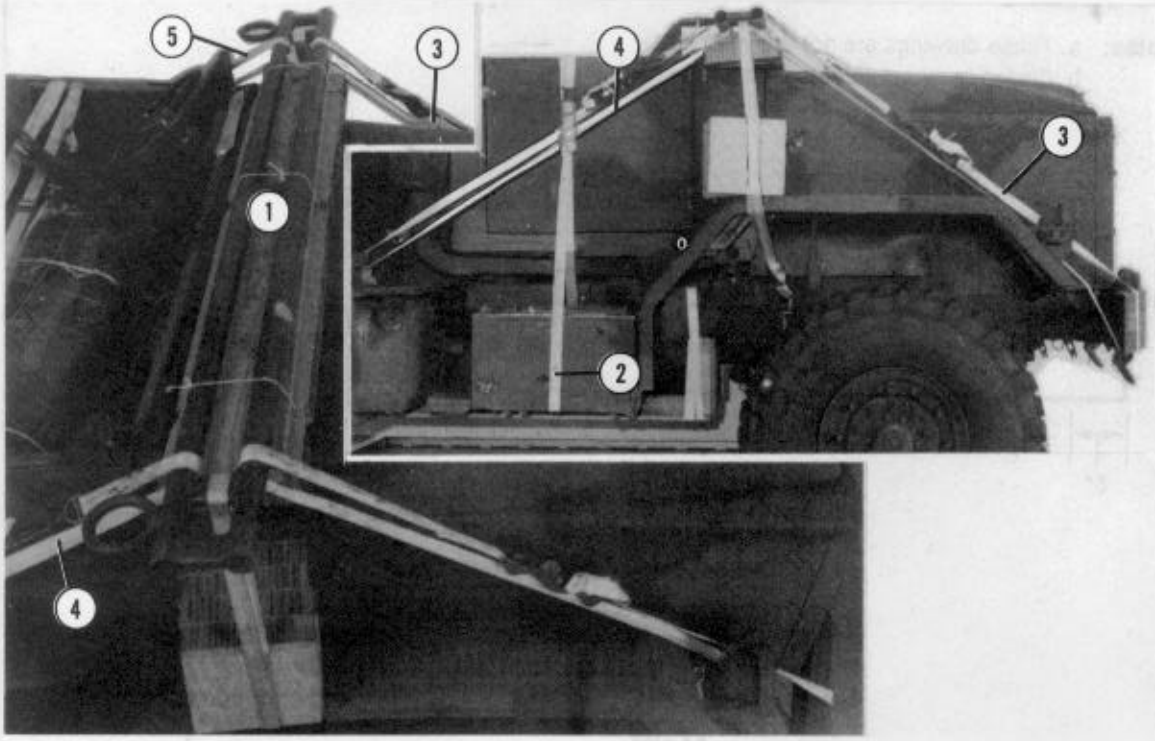
(3) Install a second 30-foot tiedown strap near the rear of the frame support adapting the procedures given in 2 above (not shown).

Note: Position the load binders on the side of the frame support so that the load binders will not touch the honeycomb stack.

Figure 10-19. Frame support installed

10-7. Building and Installing Front Sling Spreader

Build and install the front sling spreader as shown in Figure 10-20.



(1) Place a 12- by 80-inch piece of honeycomb across the hood of the truck. Place a 10- by 80-inch piece of lumber on top of the honeycomb. Position an ACB on top of the 10- by 80-inch lumber. Tie the ACB, lumber, and honeycomb with type III nylon cord in three places.

(2) Place four pieces of 12- by 12-inch honeycomb and one piece of 12- by 12-inch plywood on the body of each side of the truck for support. Run a lashing around the main frame, over the plywood and through the square hole of the ACB. Secure the lashing with a D-ring and a loadbinder. Repeat on the other side of the truck.

(3) Run a 15-foot lashing around the forward bar on the ACB and the front bumper on both sides of the truck. Secure lashing with a loadbinder and D-ring.

(4) Run a 15-foot lashing around the aft bar on the ACB and the spare tire bracket on the right side of the truck. Secure the lashing with a loadbinder and D-ring.

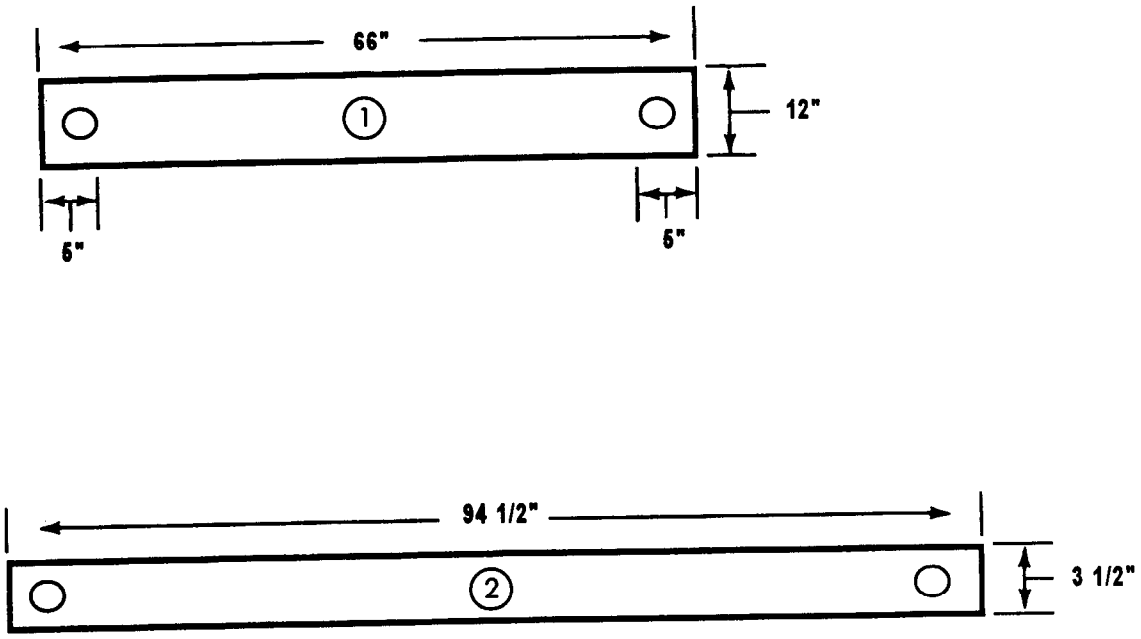
(5) Run a 15-foot lashing around the aft bar on the ACB, behind the air intake pipe, and around the spare tire bracket on the left side of the truck. Secure the lashing with a loadbinder and D-ring.

Figure 10-20. Front sling spreader built and installed

10-8. Building and Installing Middle Sling Spreader

Build the middle sling spreader as shown in Figures 10-21 and 10-22 and install the middle sling spreader as shown in Figure 10-23.

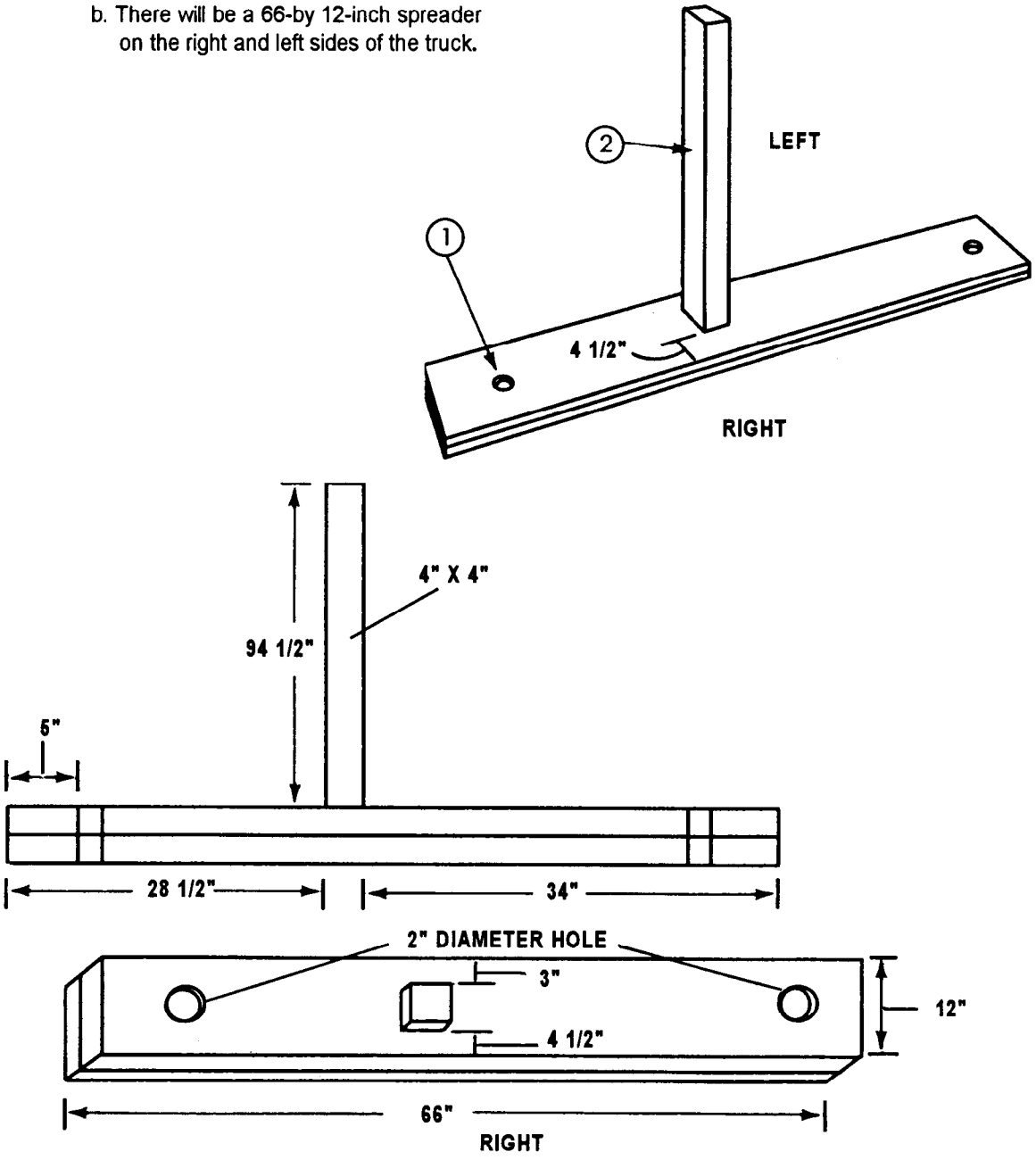
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	4	11 3/4 (actual)	66	2- by 12-inch lumber
2	1	3 1/2 (actual)	94 1/2	4- by 4-inch lumber

Figure 10-21. Material required for the middle sling spreaders

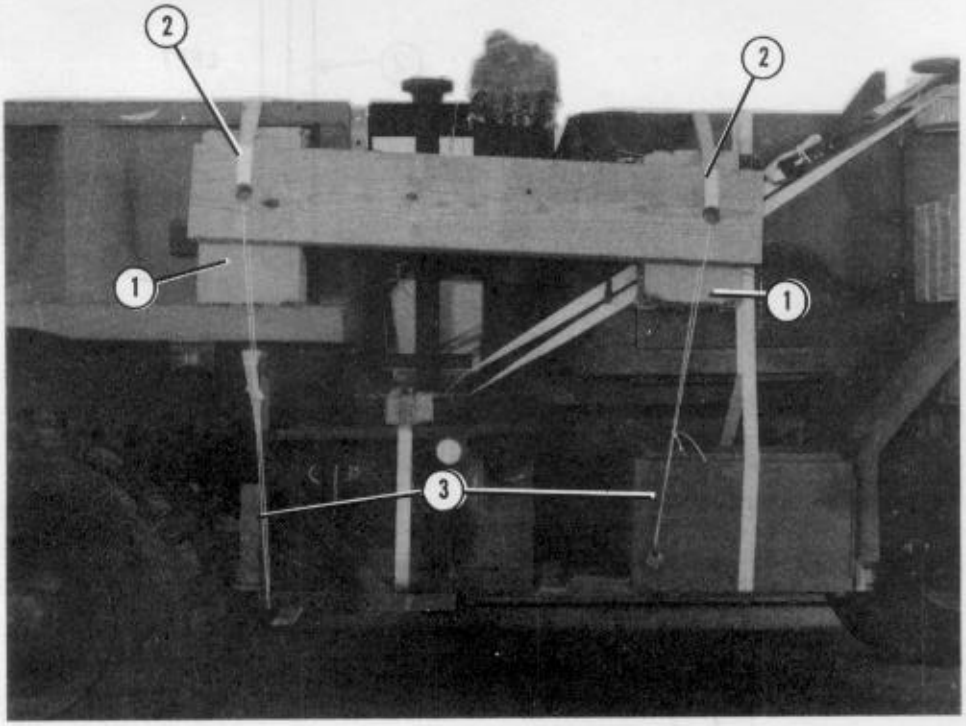
Notes: a. These drawings are not drawn to scale.
b. There will be a 66-by 12-inch spreader on the right and left sides of the truck.



Step:

1. Construct a middle sling spreader as shown.
2. Secure the lumber in place as shown with sixteen-penny nails.

Figure 10-22. Middle sling spreader constructed



(1) Place a 6- by 12 and a 10 1/2- by 12-inch piece of honeycomb against the body of the truck on the right and left sides. Place a 12- by 21-inch piece of honeycomb against the 6- by 12 and 10 1/2-inch pieces of honeycomb on the right and left sides. Place two 12- by 18-inch pieces of honeycomb against the door of the truck on both sides.

(2) Place the middle sling spreaders up and against the honeycomb on the door of the truck and the pre-positioned honeycomb on the body. Use two 30-foot tie-down assemblies to secure the spreader. Run one lashing through the right hole and the other through the left hole. Run both lashings over the top of the truck and through the right and left holes of the spreader on the other side of the truck and back to the top. Secure the lashings in the cab and body of the truck with loadbinders and D-rings.

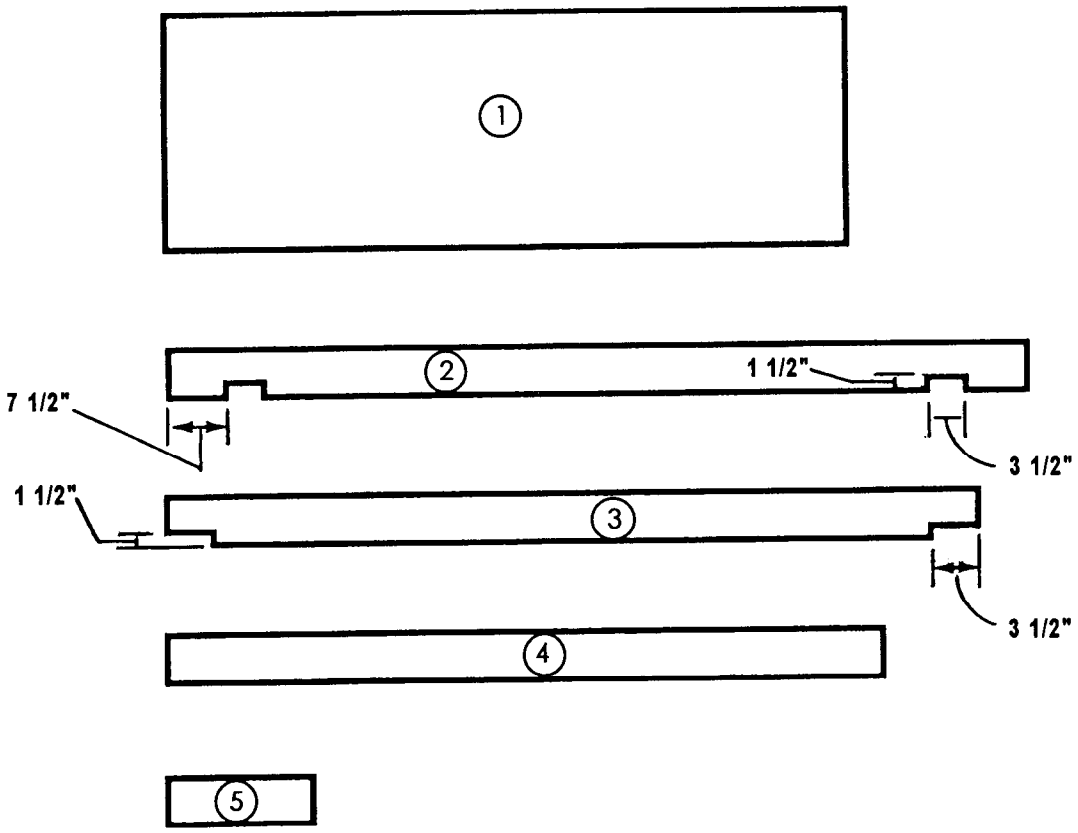
(3) Run type III nylon cord through both holes in the spreader. Secure one end of nylon cord to the tire tray holder and the other to the ovm box on each side of the truck.

Figure 10-23. Middle sling spreader installed

10-9. Building and Installing Rear Sling Spreader

Build the rear sling spreader as shown in Figures 10-24 and 10-25. Install the rear sling spreader as shown in Figure 10-26.

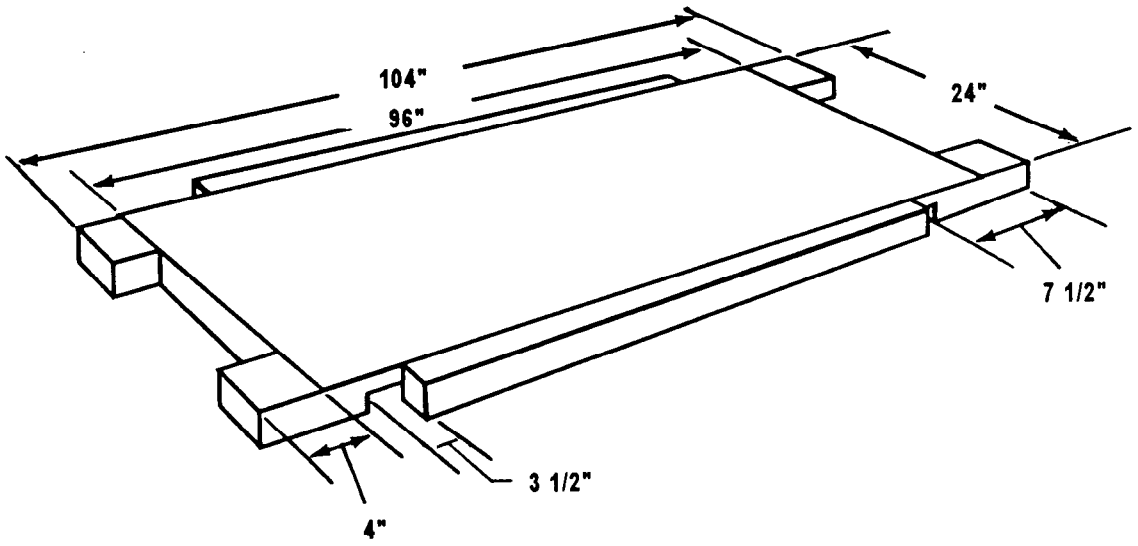
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.

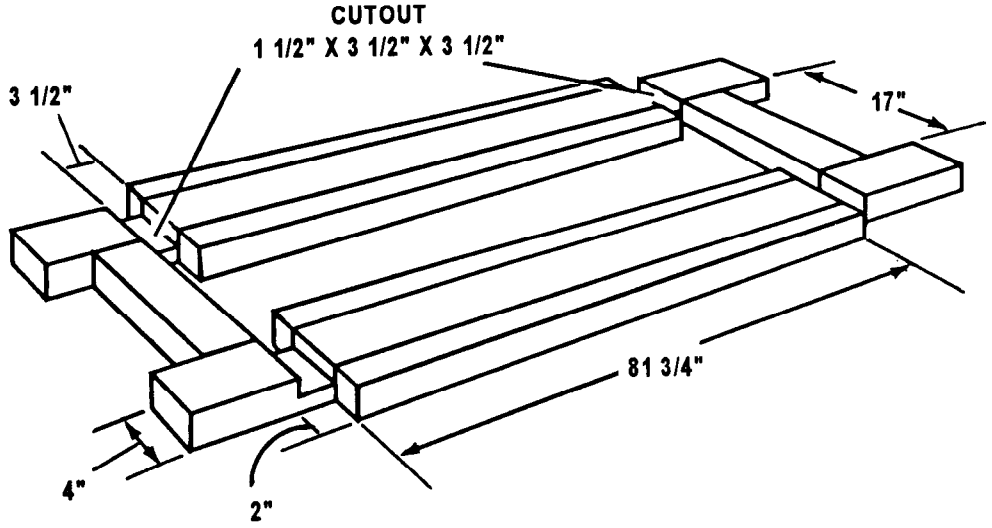


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	24	96	3/4-inch plywood
2	2	3 1/2 (actual)	104	4- by 4-inch lumber
3	2	3 1/2 (actual)	88 1/2	2- by 4-inch lumber
4	2	3 1/2 (actual)	81 3/4	2- by 4-inch lumber
5	2	3 1/2 (actual)	17	4- by 4-inch lumber

Figure 10-24. Material required for the rear suspension sling spreader

Note: These drawings are not drawn to scale.

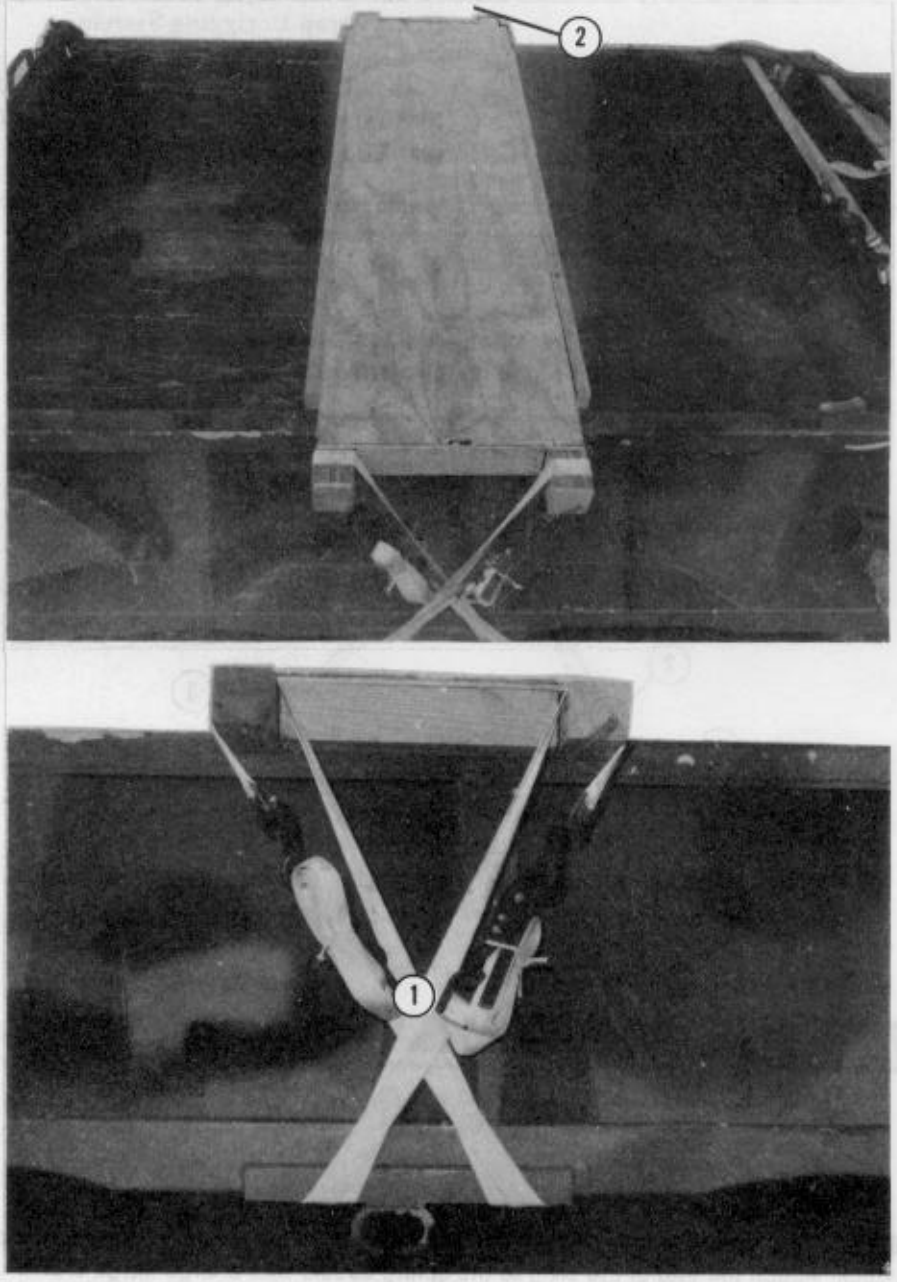




Step:

1. Construct a rear sling spreader as shown.
2. Secure the plywood and lumber in place as shown with eightpenny and sixteen-penny nails.

Figure 10-25. Rear sling spreader constructed



(1) Place the rear sling spreader across the body of the truck, centered between the rear tires. Run a 15-foot lashing through each hole under the body of the truck. Forming an" X" with the two lashings, run the free ends around the ends of the 4- by 4-inch lumber. Secure the lashings with two loadbinders and two D-rings.

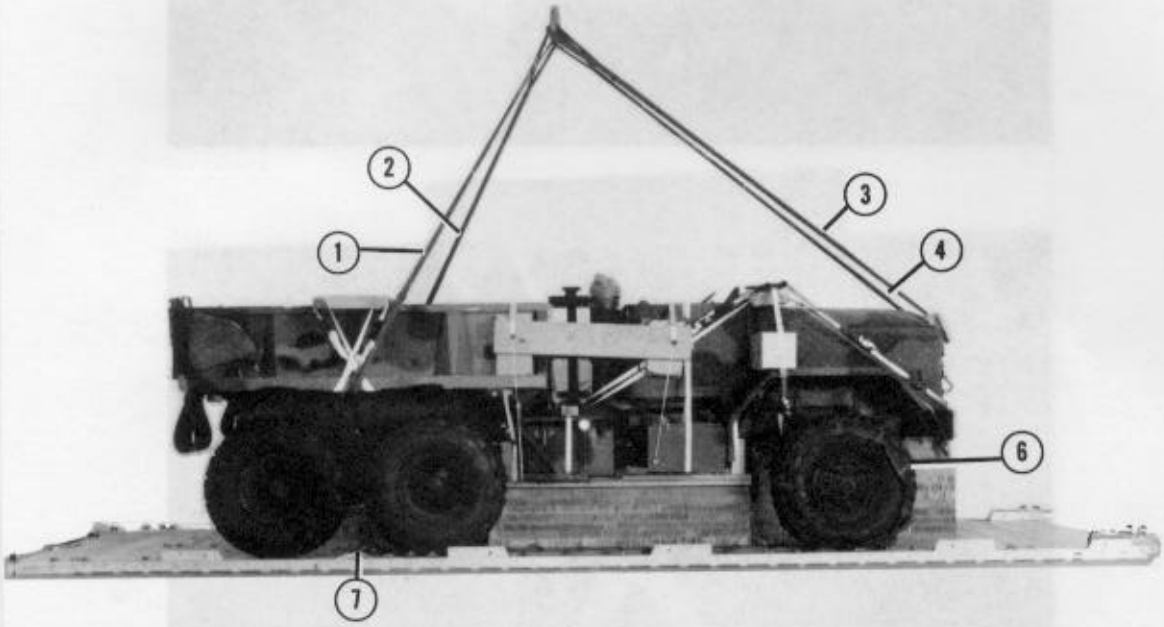
(2) Repeat procedures in step 1 for the left side of the truck.

Figure 10-26. Rear sling spreader installed

10-10. Positioning Truck and Installing Heavy-Drop Derigging System

Install the lifting slings and HDDS as shown in Figure 10-27. Position the truck on the platform as shown in Figure 10-28.

CAUTION
When lifting the truck, place a 12- by 80-inch piece of honeycomb and a 2- by 10- by 80-inch lumber against the front of the hood to avoid damage.



(1) Pass the end of a 16-foot (4-loop), type XXVI nylon sling between the side body and the body floor of the truck. Attach the end of the sling to the spring saddle with a large cargo clevis.

(2) Install another sling on the left side of the truck as in step 1.

(3) Attach the end of a 16-foot (4-loop), type XXVI nylon sling to the front lifting shackle with two large clevises.

(4) Install another sling on the left side of the truck as in step 3.

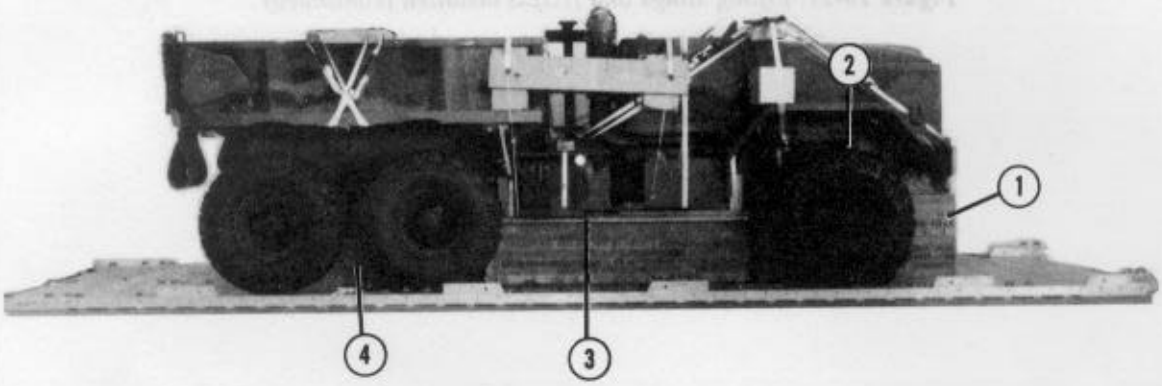
Figure 10-27. Lifting slings and HDDS installed

(5) After the slings are attached to the truck and the lifting device, place the transmission in neutral and release the brakes (not shown).

(6) Wrap a HDDS around each front tire of the truck. Tie the end of the HDDS to itself with a double length of type I, 1/4-inch cotton webbing. Run the HDDS along the right and left sides of the platform.

(7) Secure the HDDS with a 60-inch piece of type V nylon webbing to bushing 46 and tie-down ring A12 on the right side of the platform and secure the HDDS with a 60-inch piece of type V nylon webbing to bushing 46A and tie-down ring B12 to the left side of the platform.

Figure 10-27. Lifting slings and HDDS installed (continued)



(1) Center the front bumper and main frame on stack 1.

(2) Center the front axle on stack 2.

(3) Center the frame support on stack 4.

(4) Center both differential gears on top of stack 5.

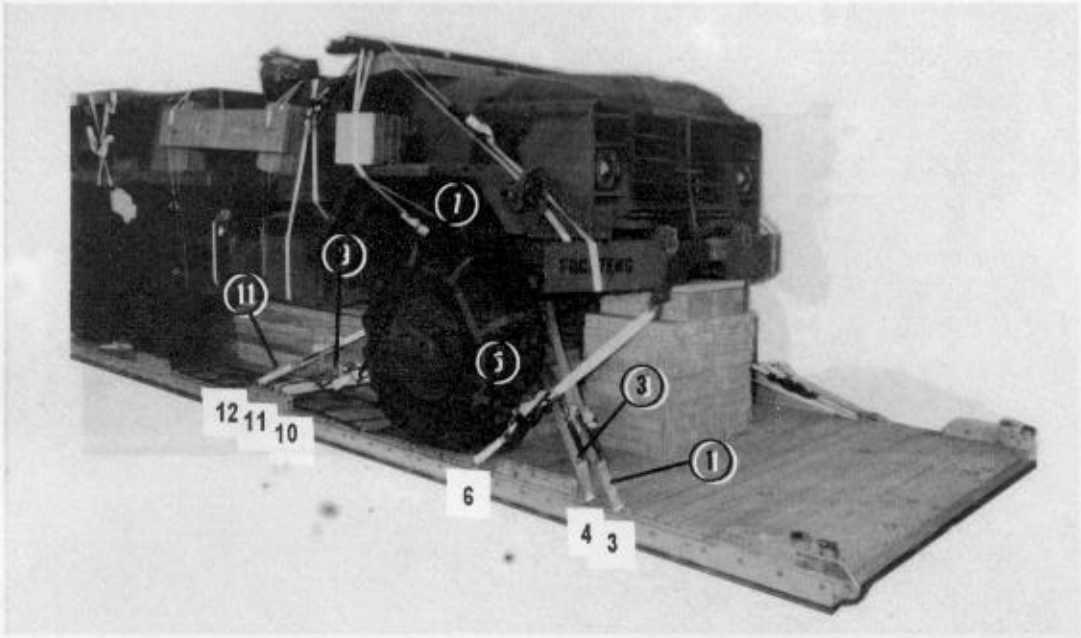
(5) Remove the lifting slings (not shown).

Figure 10-28. Truck positioned

10-11. Installing Lashings

Lash the truck to the platform as shown in Figure 10-29. Bind the ends of the lashings together according to FM 10-500-2/TO 13C7-1-5.

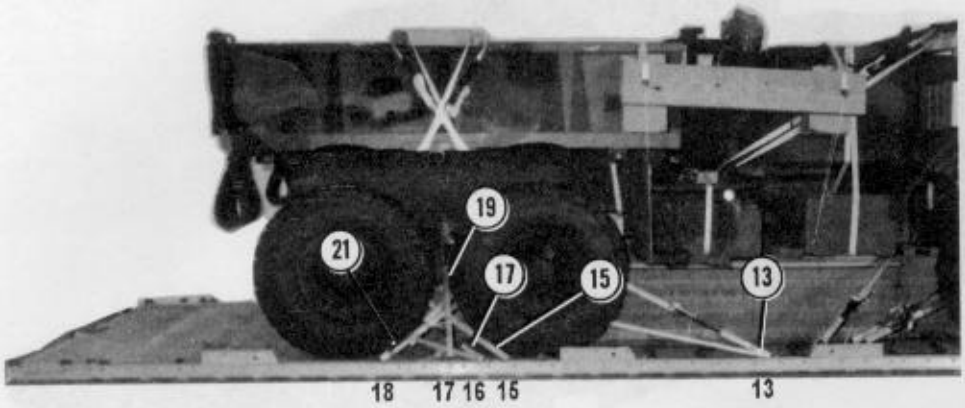
Note: Pad all lashings that are looped through the wheel with cellulose wadding.



Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
1	3	Around front axle and leaf springs, right side.
2	3A	Around front axle and leaf springs, left side.
3	4	Around front axle and leaf springs, right side.
4	4A	Around front axle and leaf springs, left side.
5	6	Through front lifting shackle, right side.
6	6A	Through front lifting shackle, left side.
7	10	Around front axle, right side.
8	10A	Around front axle, left side.
9	11	Around front axle, right side.
10	11A	Around front axle, left side.
11	12	Around leaf spring, right side.
12	12A	Around leaf spring, left side.

Figure 10-29. Lashings installed

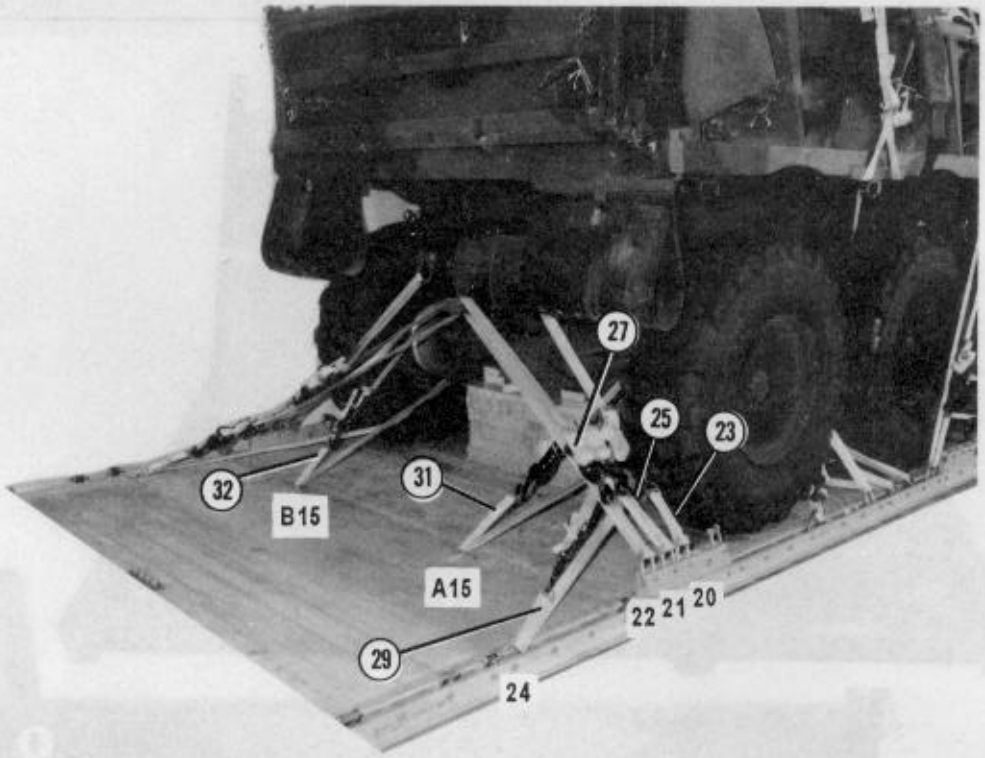
Note: Pad all lashings that are looped through the wheel with cellulose wadding.



Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
13	13	Around the drum of first rear tire, right side.
14	13A	Around the drum of first rear tire, left side.
15	15	Through leaf spring bracket of rear tire, right side.
16	15A	Through leaf spring bracket of rear tire, left side.
17	16	Around drum of second rear tire, right side.
18	16A	Around drum of second rear tire, left side.
19	17	Through spring saddle, right side.
20	17A	Through spring saddle, left side.
21	18	Through leaf spring bracket of front tire, right side.
22	18A	Through leaf spring bracket of front tire, left side.

Figure 10-29. Lashings installed (continued)

Note: Pad all lashings that are looped through the wheel with cellulose wadding.



Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
23	20	Through rear lifting shackle, right side.
24	20A	Through rear lifting shackle, left side.
25	21	Through tow pintle, right side.
26	21A	Through tow pintle, left side.
27	22	Through tow pintle, right side.
28	22A	Through tow pintle, left side.
29	24	Around wheel drum, right side.
30	24A	Around wheel drum, left side.
31	A15	Around wheel drum, right side.
32	B15	Around wheel drum, left side.

Figure 10-29. Lashings installed (continued)

10-12. Preparing Hard Overhead Cab Cover

Prepare the hard overhead cab cover as shown in Figure 10-30.

(1) Place three pieces of honeycomb in the slots of the cab cover, against the back and on the bottom (not shown).

(2) Pad and tape the windshield with cellulose wadding and pressure sensitive tape (not shown).

(3) Place a piece of 12- by 80-inch honeycomb on top of the three bottom pieces.

(4) Place a piece of 26- by 80-inch honeycomb in the vertical position, on top of the 12- by 80-inch piece of honeycomb.

Figure 10-30. Hard overhead cab cover prepared

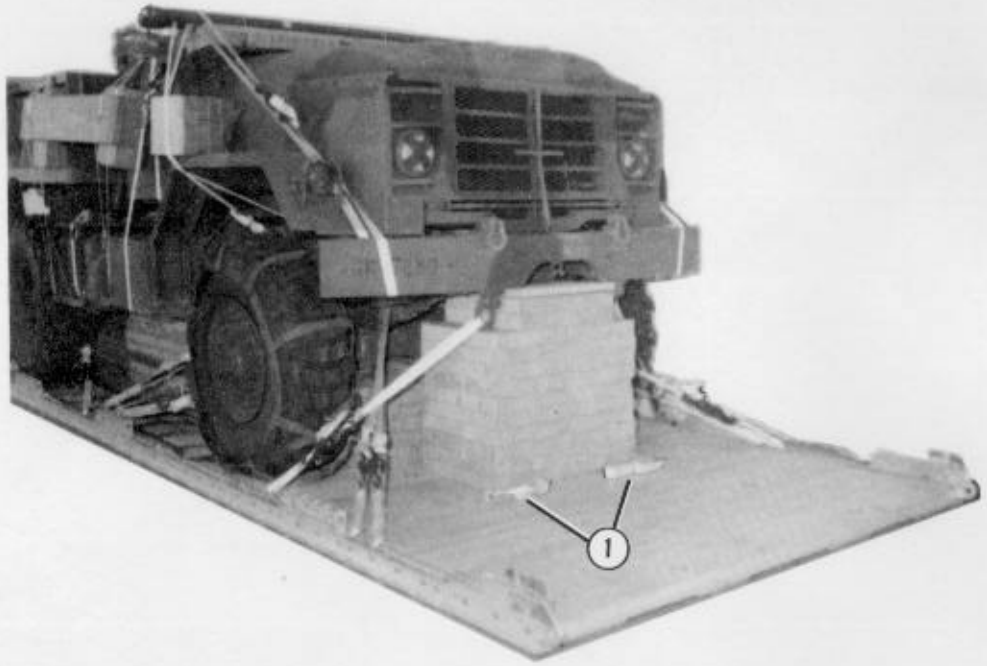
(5) Place a piece of 36- by 36-inch honeycomb between the truck grill and the rear of the cab cover. Secure the vertical honeycomb with a 15-foot tie-down assembly.

(6) Install two type V tie-down clevises on each side of the cab cover for tie-down points.

Figure 10-30. Hard overhead cab cover prepared (continued)

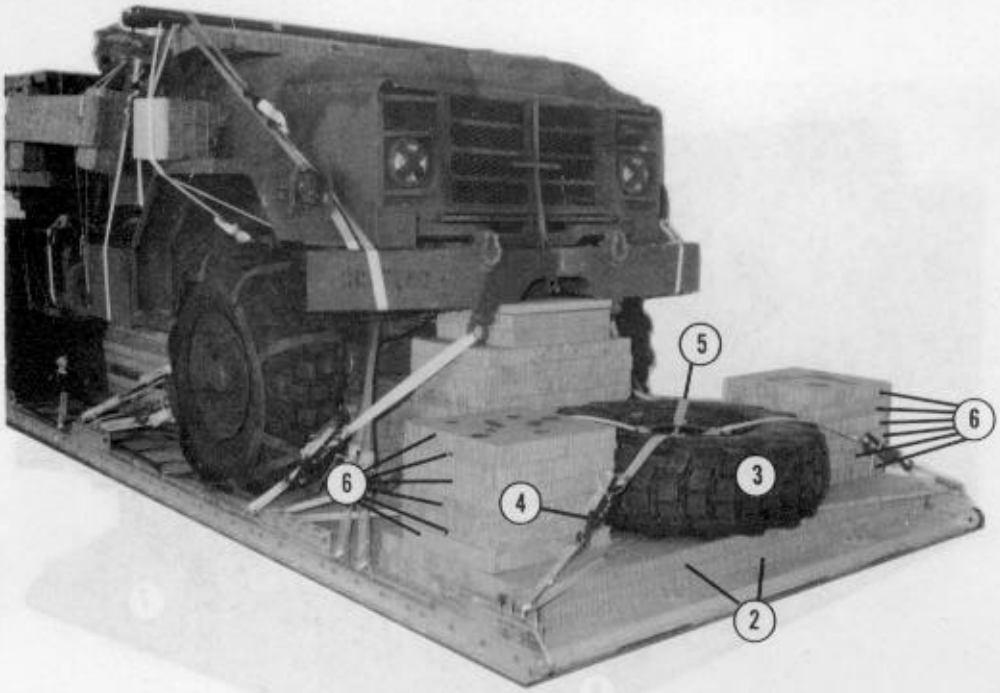
10-13. Installing Spare Tire and Hard Cab Cover

Install the spare tire and hard cab cover as shown in Figure 10-31.



(1) Pre-position two 36- by 96-inch lashings through tie-down rings A3 and B3.

Figure 10-31. Spare tire and hard cab cover installed



(2) Place two 36- by 96-inch pieces of honeycomb, centered, five inches from the front edge of the platform.

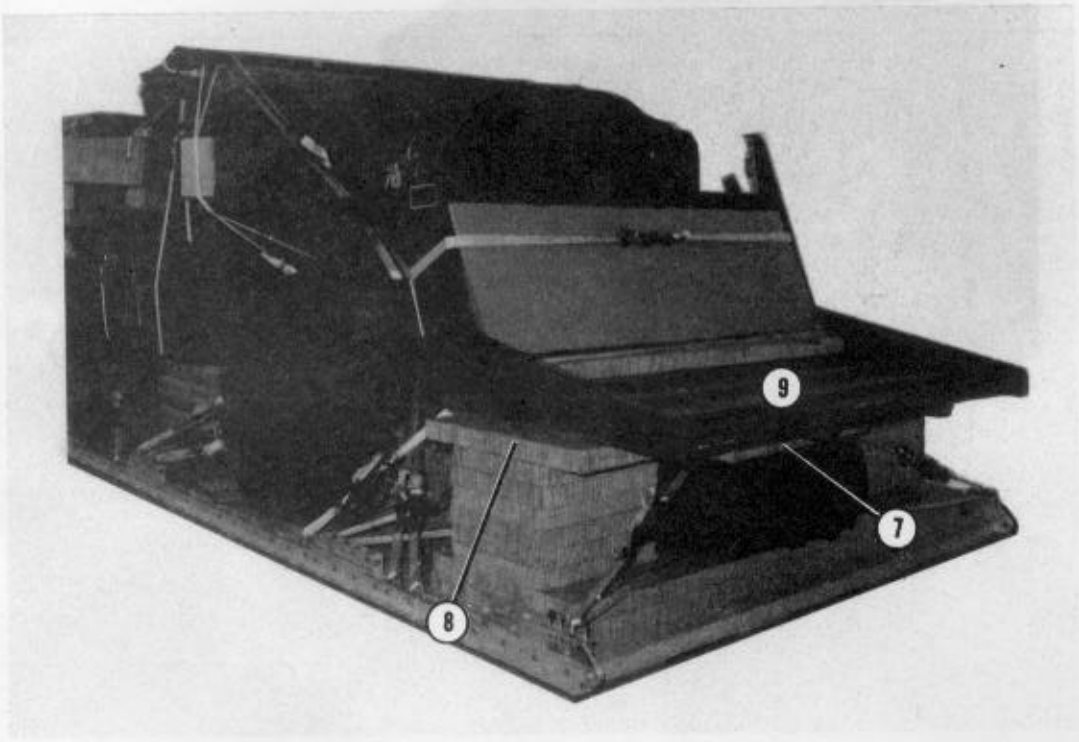
(3) Center the spare tire on the honeycomb.

(4) Run a 15-foot lashing through clevis 1 and the tire and another through 1A and the tire.

(5) Run a 15-foot lashing through clevis 5 and the tire and another through 5A and the tire. Secure all four lashings with D-rings and loadbinders being careful not to move the tire.

(6) Place six pieces each of 22- by 22-inch honeycomb on the right and left sides of the spare tire.

Figure 10-31. Spare tire and hard cab top installed (continued)



(7) Place a 36- by 36-inch piece of honeycomb on top of the spare tire.

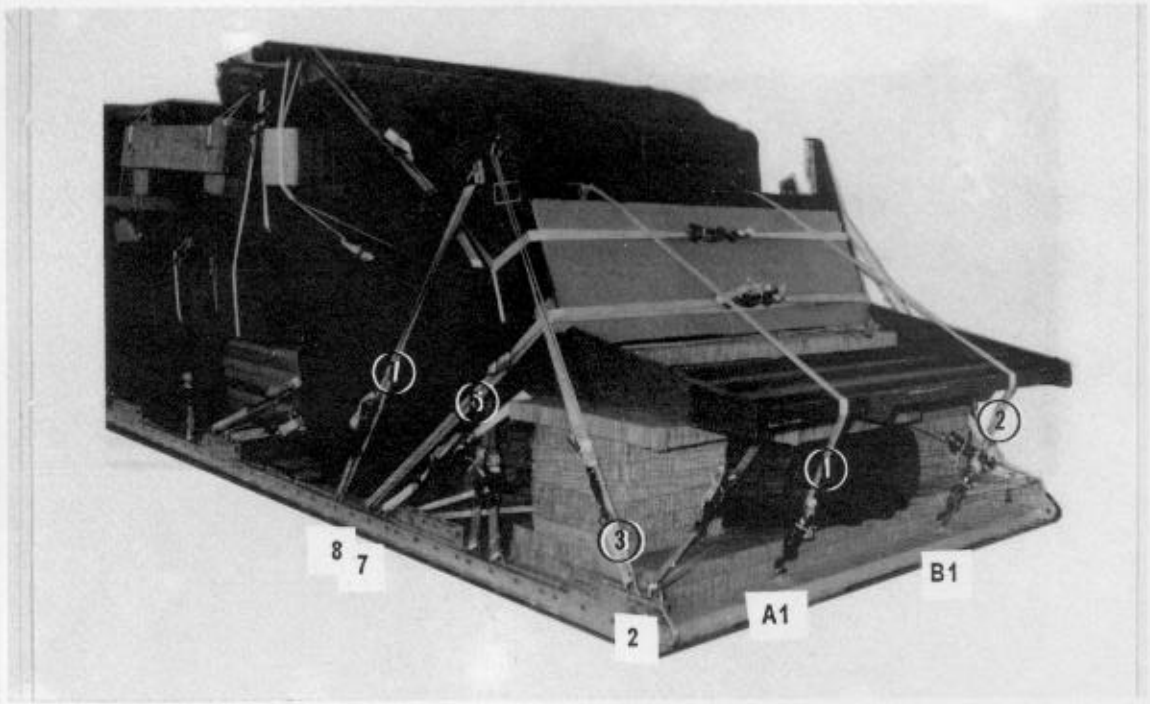
(8) Place a 36- by 96-inch piece of honeycomb across the honeycomb and tire.

(9) Center the cab cover on the 36- by 96-inch piece of honeycomb. (There will be a 10 1/2-inch overhang on the front of the platform).

Figure 10-31. Spare tire and hard cab cover installed (continued)

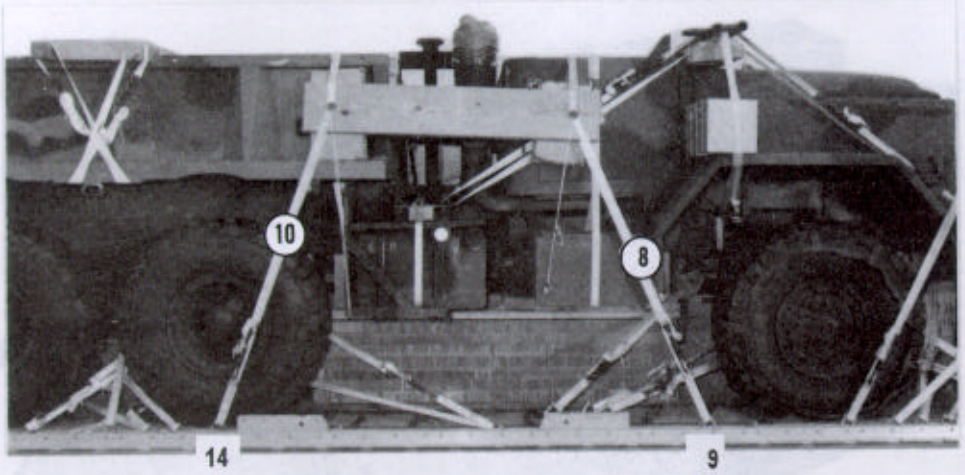
10-14. Lashing Cab Cover and Middle Sling Spreader to Platform

Lash the cab cover and middle sling spreader to the platform as shown in Figure 10-32.



Lashing Number	Tiedown Clevis Number	Instructions
1	A1	Run the pre-positioned lashing over top of cab cover and secure to tie-down ring.
2	B1	Run the pre-positioned lashing over top of cab cover and secure to tie-down ring.
3	2	Pass lashing through clevis on cab cover, right side.
4	2A	Pass lashing through clevis on cab cover, left side.
5	7 to 7A	Run a 45-foot lashing through both clevises, across the front of the cab cover. Secure on front with two D-rings and a loadbinder.
6	8	Pass lashing through clevis on cab cover, right side.
7	8A	Pass lashing through clevis on cab cover, left side.

Figure 10-32. Lashings installed

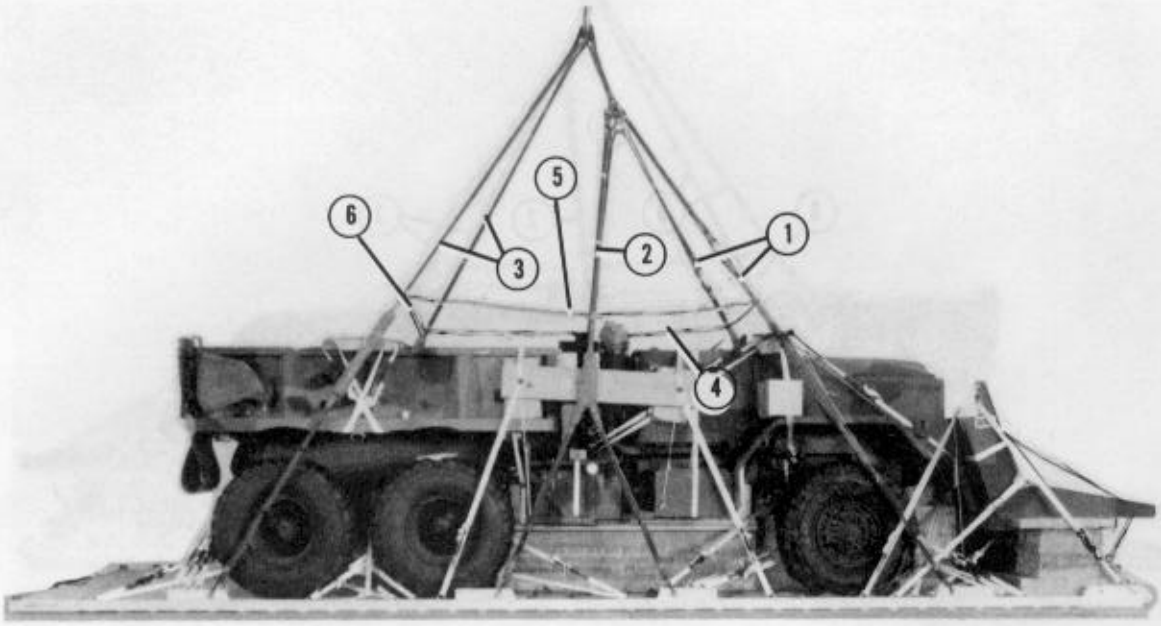


Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
8	9	Through hole in middle sling spreader, right side.
9	9A	Through hole in middle sling spreader, left side.
10	14	Through hole in middle sling spreader, right side.
11	14A	Through hole in middle sling spreader, left side.

Figure 10-32. Lashings installed (continued)

10-15. Installing and Safetying Suspension Slings

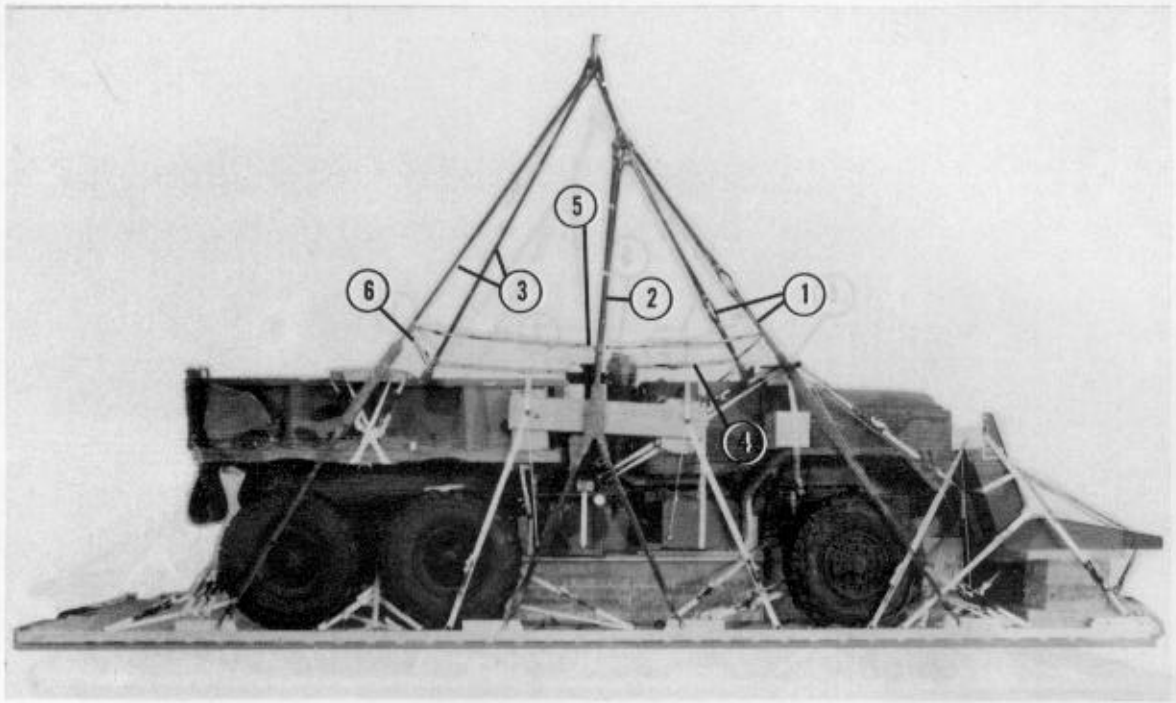
Install and safety the suspension slings as shown in Figure 10-33.



(1) Form the front suspension slings by attaching an 11-foot (4-loop), type XXVI sling to a 5 1/2-inch link assembly. Fold an 11-foot (2-loop), type XXVI in half. Attach the free ends to the opposite end of the 5 1/2-inch link assembly. Place the looped end of the sling on the right spacer of a 3-point link assembly. Place a sling sleeve on the lower portion of the front slings and wrap the ends with pressure sensitive tape. Attach slings to the tandem links with large clevises.

(2) Form the center suspension slings by folding two 11-foot (2-loop), type XXVI nylon slings in half. Attach the free ends to two large clevises. Attach the clevises to the second and third suspension links. Route the bell of a large cargo clevis through the loops of both 11-foot slings. Attach one end of a 9-foot (4-loop), type XXVI nylon sling to the left spacer of the 3-point link assembly. Attach a 3-foot (4-loop), type XXVI nylon sling to the top spacer.

Figure 10-33. Suspension slings installed and safetied



(3) Form the rear suspension slings by using two 20-foot (4-loop), type XXVI nylon slings and two large clevises. Attach a large clevis to each sling. Attach the large clevises to the rear tandem links. Attach the slings to the crane hook. Pad the slings with felt padding. Secure the felt with pressure sensitive tape and type III nylon cord.

(4) After all suspension slings have been assembled, safety the front slings to the ACB with type III nylon cord. Install a deadman's tie and safety tie according to FM 10-500-2/TO 13C7-1-5.

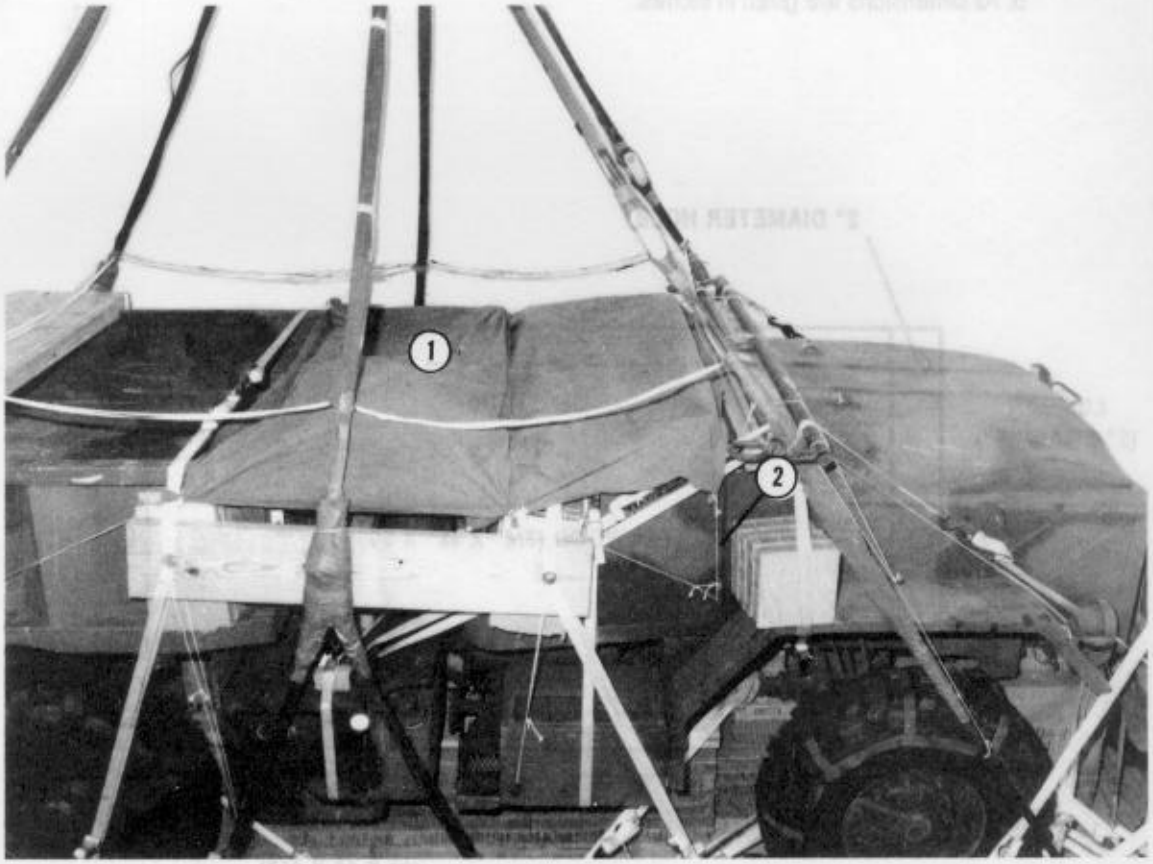
(5) Safety the middle slings, from right to left, with type III nylon cord.

(6) Safety the rear slings, from right to left, with type III nylon cord.

Figure 10-33. Suspension slings installed and safetied (continued)

10-16. Installing Load Cover

Install a load cover as shown in Figure 10-34.



(1) Cut a 5- by 7 1/2-foot piece of cotton duck cloth. Place the cloth over the cab compartment and the spare tire holder compartment.

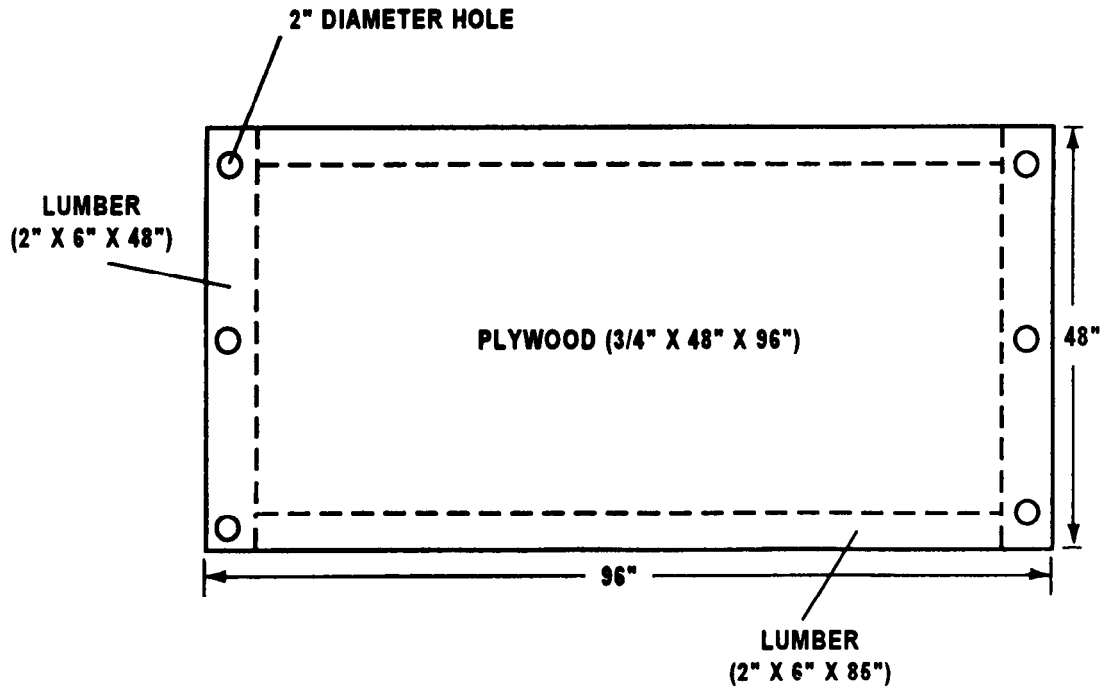
(2) Secure the cloth on the corners with type III nylon cord.

Figure 10-34. Load cover installed

10-17. Building and Installing Parachute Stowage Platform

Build the parachute stowage platform as shown in Figure 10-35. Build the honeycomb stacks, install and secure the stowage platform as shown in Figure 10-36.

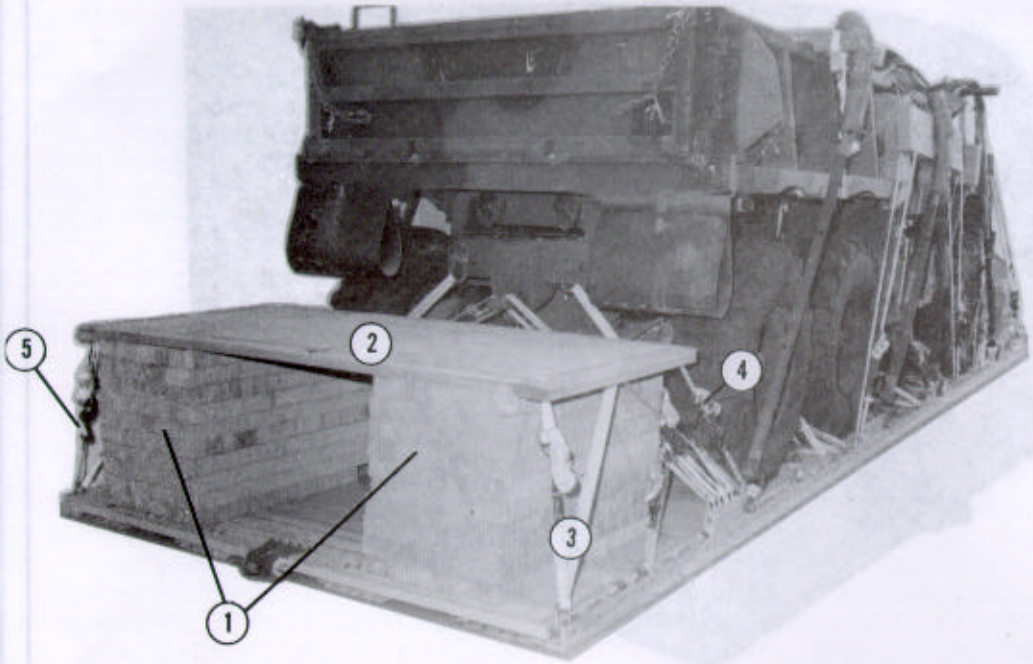
Notes: a. This drawing is not drawn to scale.
b. All dimensions are given in inches.



Step:

1. Construct the parachute stowage platform as shown.
2. Secure the lumber and plywood in place, as shown, with eightpenny nails.

Figure 10-35. Parachute stowage platform constructed



(1) Make two ten layer stacks of 24- by 48-inch honeycomb. Place a stack 14 inches from each side rail and 3 inches from the rear edge of the platform.

(2) Center the stowage platform on the honeycomb stacks.

(3) Run a 15-foot tie-down assembly through clevis 27 and up through the center hole and down through the rear hole of the parachute stowage platform. Secure the ends of the assembly according to FM 10-500-2/TO 13C7-1-5.

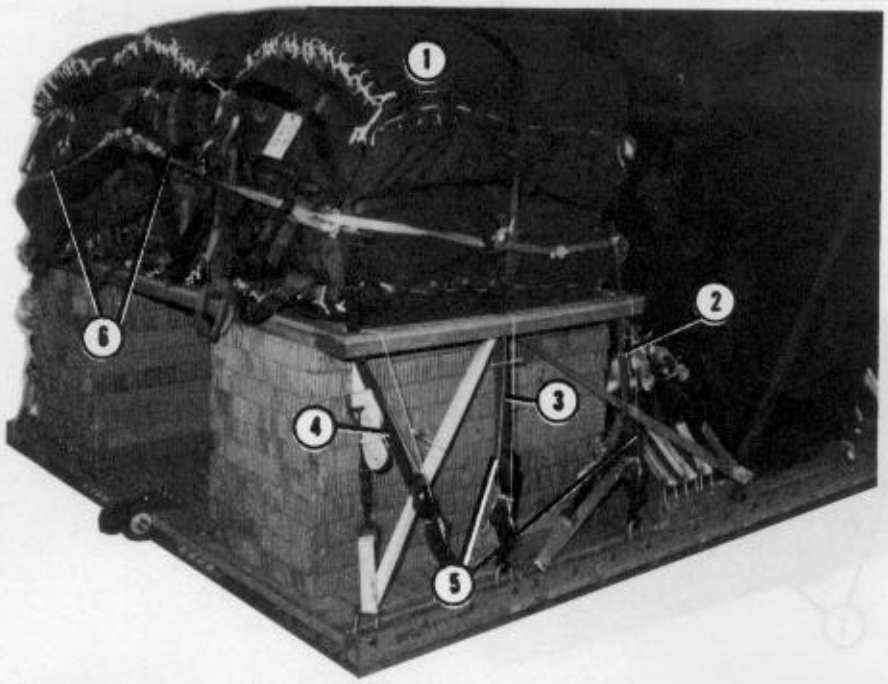
(4) Run a 15-foot tie-down assembly through clevis 19 and up through the center hole and down through the forward hole of the parachute stowage platform. Secure the ends of the assembly according to FM 10-500-2/TO 13C7-1-5.

(5) Lash the other side of the stowage platform the same way using clevises 27A and 19A.

Figure 10-36. Parachute stowage platform installed and secured

10-18. Stowing Cargo Parachutes

Stow six G-11C cargo parachutes on the truck as shown in Figure 10-37.



(1) Prepare and position six G-11C cargo parachutes in the rear of the truck as shown. Each parachute requires a 120-foot (2-loop), type XXVI nylon riser extension. Make sure the riser extensions meet the requirements and restrictions in FM 10-500-2/TO 13C7-1-5.

(2) Install a 10-yard, type X nylon webbing parachute restraint strap on the front of the cargo parachutes according to the procedures in FM 10-500-2/TO 13C7-1-5. Secure the ends of the strap with loadbinders and D-rings to clevises 23 and 23A.

(3) Install a 10-yard, type X nylon webbing parachute restraint strap on the middle of the cargo parachutes according to the procedures in FM 10-500-2/TO 13C7-1-5. Secure the ends of the strap with loadbinders and D-rings to clevises 25 and 25A.

(4) Install a 10-yard, type X nylon webbing parachute restraint strap on the rear of the cargo parachutes according to the procedures in FM 10-500-2/TO 13C7-1-5. Secure the ends of the strap with loadbinders and D-rings to clevises 26 and 26A.

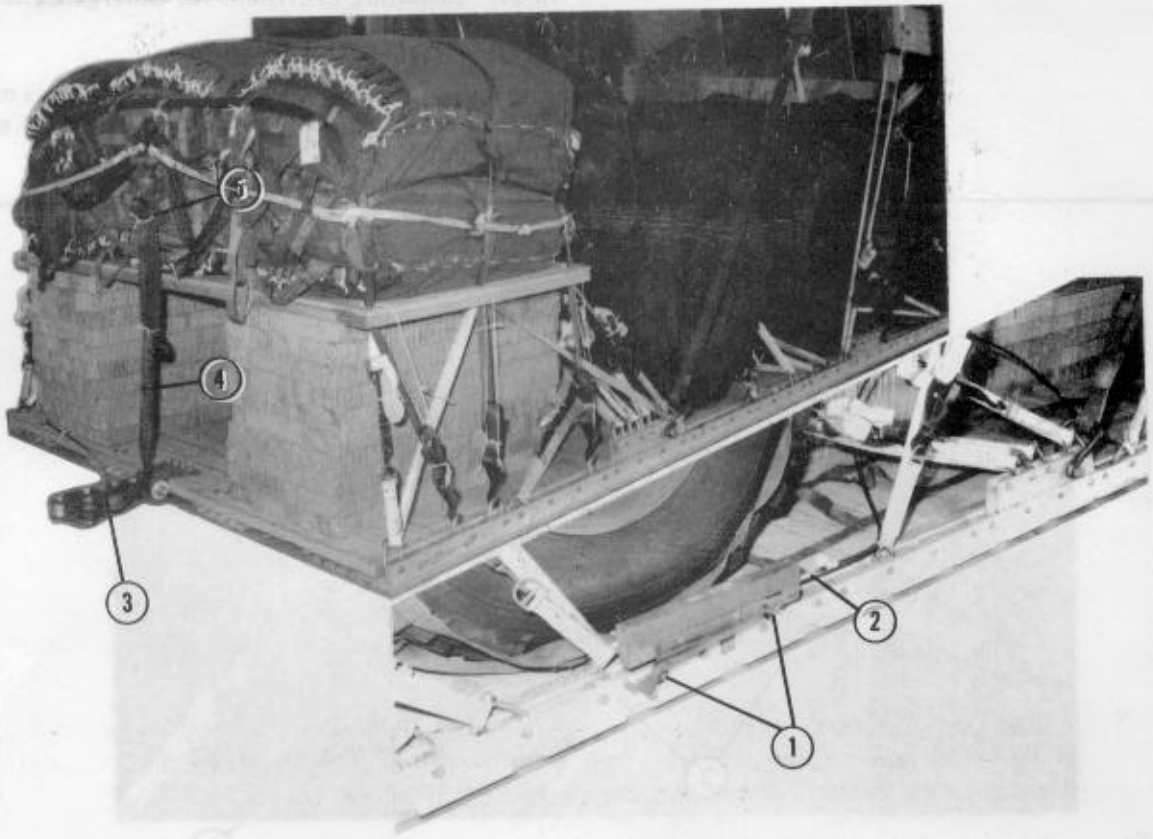
(5) Safety the loadbinders with type III nylon cord.

(6) Install two multicut parachute release straps according to FM 10-500-2/TO 13C7-1-5.

Figure 10-37. Cargo parachutes installed

10-19. Installing Extraction System

Install the EFTC extraction system as shown in Figure 10-38.



(1) Attach the type V EFTC mounting brackets to the front mounting holes in the left platform rail.

(2) Install the actuator with a 28-foot cable to the EFTC mounting brackets according to FM 10-500-2/TO 13C7-1-5.

(3) Attach the latch assembly to the extraction bracket and the release cable to the latch assembly according to FM 10-500-2/TO 13C7-1-5. Safety the release cable to the outside lashings with type I, 1/4-inch cotton webbing.

(4) Connect one end of a 9-foot (2-loop), type XXVI nylon webbing sling (deployment line) to the top spacer of the link assembly. Connect the free end to the center large suspension clevis on the 3-foot clustering slings.

(5) Fold the excess deployment line, and secure the folds in place with tape or type I, 1/4-inch cotton webbing.

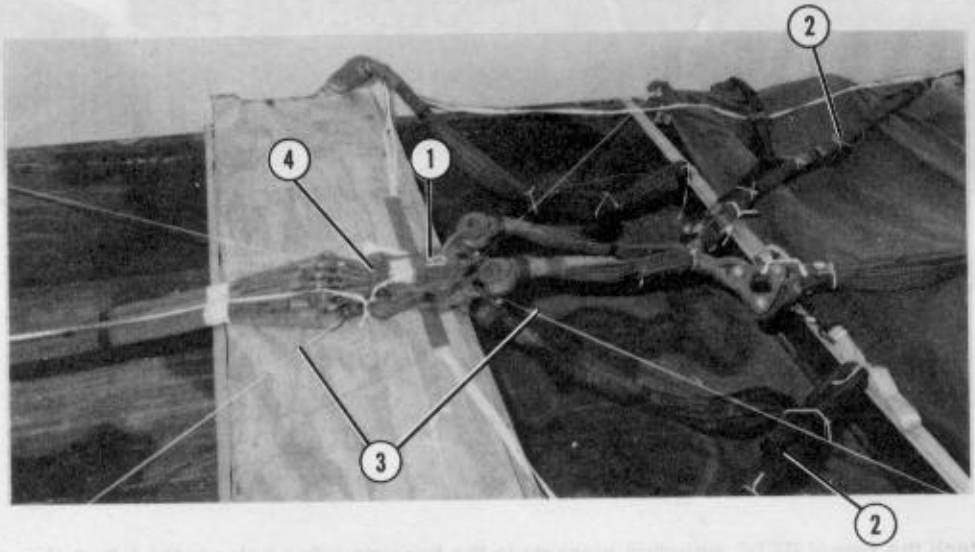
Figure 10-38. Extraction system installed

10-20. Installing Release System

Prepare and install the release system as shown in Figure 10-39.

10-21. Installing Provisions for Emergency Restraints

Install provisions for emergency restraints on the load as outlined in table 3-3 through 3-5 of FM 10-500-2/TO 13C7-1-5.



(1) Prepare an M-2 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Attach the release assembly to the suspension slings and the cargo parachutes according to FM 10-500-2/TO 13C7-1-5. Center the release assembly on the top of the load.

(2) Fold the suspension slings, and secure the folds with single turns of type I, 1/4-inch cotton webbing.

(3) Secure the top of the release assembly according to FM 10-500-2/TO 13C7-1-5. Secure the bottom of the release assembly according to FM 10-500-2/TO 13C7-1-5.

(4) Install the arming lanyard according to FM 10-500-2/TO 13C7-1-5.

Figure 10-39. Release system installed

10-22. Placing Extraction Parachute

Place the extraction parachute as described below.

a. C-130 Aircraft. Place two heavy-duty 28-foot cargo extraction parachutes; a 60-foot (6-loop), type XXVI nylon webbing extraction line; an extraction line leaf; and a four-point link assembly on the load for installation in the aircraft.

b. C-141 Aircraft. Place two heavy-duty 28-foot cargo extraction parachutes, a continuous 120-foot (6-loop), type XXVI nylon webbing extraction line, and an extraction line leaf on the load for installation in the aircraft.

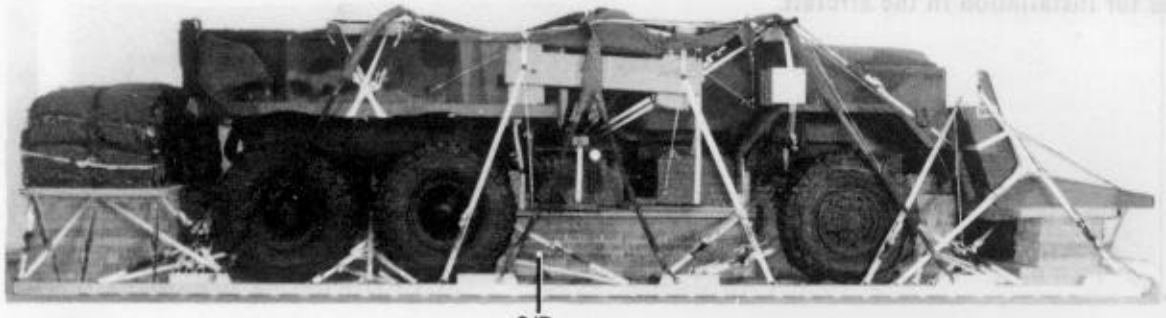
c. C-5 Aircraft. See FM 10-500-2/TO 13C7-1-5 for extraction parachute requirements.

10-23. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 10-40. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load has been prepared according to AFR 71-4/TM 38-250. If the load varies, the weight, height, CB, and parachute requirements must be computed.

CAUTION

Make the final rigger inspection required by FM 10-500-2/ TO 13C7-1-5 before the load leaves the rigging site.



RIGGED LOAD DATA

Weight:	Load shown	30,340 pounds
	Maximum allowance	31,340 pounds
Height		97 inches
Width		108 inches
Length		394 1/2 inches
Overhang:	Front	10 1/2 inches
	Rear	0 inches
CB (from front edge of platform)		203 inches
Extraction System		EFTC

Figure 10-40. M929A1, 5-ton dump truck rigged for low-velocity airdrop

10-24. Equipment Required

Use the equipment listed in Table 10-1 to rig this load.

Table 10-1. Equipment required for rigging the M929A2, 5-ton dump truck for low-velocity airdrop on a type V airdrop platform

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste,1-gal	As required
1670-00-003-4389	Bar, attitude control	1
1670-01-035-6054	Bridle, extraction line bag (Use w extraction line bag.)	1
4030-00-090-5354	Clevis, suspension, 1-in (large)	15
8305-00-242-3593	Cloth, cotton duck, 60-in	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-360-0328	Cover, clevis, large	6
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
8305-00-958-3685	Felt, 1/2-in thick	As required
1670-00-573-6790	Frame extension assembly	2
	Frame support:	
	Lumber:	
5510-00-220-6146	2- by 4-in:	
	10-in	3
	20-in	2
	26-in	2
5510-00-220-6448	2- by 6- by 26-in	1
5510-00-220-6274	4- by 4-in:	
	10-in	8
	10 3/4-in	1
	33-in	2
	96-in	2
5530-00-128-4981	Plywood, 3/4-in:	
	3 1/2- by 12 1/4-in	1
	3 1/2- by 13 1/2-in	8
	8 1/2- by 20-in	1
	13 1/2- by 13 1/2-in	3
	13 1/2- by 21 1/2-in	1
	36- by 96-in	1
1670-01-344-0825	Heavy drop derigging system	1
1670-01-183-2678	Leaf, extraction line	1
	Line, extraction:	
1670-00-064-4454	60-ft (6-loop), type XXVI nylon webbing (for C-130 aircraft)	1
1670-01-062-6312	120-ft (6-loop), type XXVI nylon webbing (for C-141 aircraft)	1

Table 10-1. Equipment required for rigging the M929A2, 5-ton dump truck for low-velocity airdrop on a type V airdrop platform (continued)

National Stock Number	Item	Quantity
	Link assembly:	
1670-00-006-2752	Four-point	3
	Two-point:	3
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(6)
5310-00-232-5165	Nut, 1-in	(6)
1670-00-003-1954	Plate, side, 5 1/2-in	(6)
5365-00-007-3414	Spacer, large	(6)
	Load spreader for honeycomb stack 2:	
5510-00-220-6146	Lumber, 2- by 4- by 8-in	2
5510-00-220-6448	Lumber, 2- by 6- by 24-in	4
5530-00-128-4981	Plywood, 3/4- by 54- by 24-in	2
	Load spreader for honeycomb stack 3:	
5510-00-220-6146	Lumber, 2- by 4- by 36-in	2
5510-00-220-6274	Lumber, 4- by 4- by 12-in	4
5530-00-128-4981	Plywood, 3/4-in:	
	36- by 12-in	3
	12- by 12-in	2
	8- by 12-in	1
	4- by 12-in	1
	Load spreader for honeycomb stack 4:	
	Lumber:	
5510-00-220-6146	2- by 4- by 46-in	2
5510-00-220-6274	4- by 4- by 94-in	2
5530-00-128-4981	Plywood, 3/4-in:	
	4- by 94-in	2
	48- by 94-in	2
	Load spreader for honeycomb stack 5:	
	Lumber:	
5510-00-220-6146	2- by 4-in:	
	12-in	2
	66-in	6
5510-00-220-6448	2- by 6- by 12-in	4
5510-00-220-6448	2- by 6- by 66-in	6
5530-00-128-4981	Plywood, 3/4-in:	
	4- by 12-in	2
	34 by 66-in	2
	Nail, steel wire, common:	
5315-00-010-4659	8d	As required
5315-00-010-4663	16d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	35 sheets

Table 10-1. Equipment required for rigging the M929A2, 5-ton dump truck for low-velocity airdrop on a type V airdrop platform (continued)

National Stock Number	Item	Quantity
	6- by 12-in	(1)
	8- by 94-in	(2)
	10 1/2- by 12-in	(1)
	12- by 12-in	(4)
	12- by 21-in	(2)
	12- by 80-in	(2)
	21- by 94-in	(1)
	22- by 22-in	(12)
	24- by 24-in	(2)
	54- by 24-in	(5)
	24- by 48-in	(10)
	24- by 48-in	(10)
	26- by 80-in	(1)
	34- by 66-in	(5)
	36- by 18-in	(5)
	36- by 12-in	(3)
	36- by 24-in	(10)
	36- by 36-in	(2)
	36- by 96-in	(3)
	Parachute, cargo:	
1670-01-016-7841	G-11B	6
	Parachute, cargo extraction:	
1670-00-040-8135	28-ft, heavy-duty	1
	Platform, AD, type V, 32-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2372	Clevis, load tiedown	(58)
1670-01-162-2376	Extraction bracket assembly	(1)
1670-01-247-2389	Suspension link	(6)
1670-01-162-2381	Tandem link	(2)
5530-00-128-4981	Plywood, 3/4-in: (Parachute Stowage Tray)	
	48- by 96-in	(1)
670-01-097-8817	Release, cargo parachute, M-2	1
	Sling, cargo, airdrop:	
	For antitumble:	
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	2
	For deployment line:	
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	1

Table 10-1. Equipment required for rigging the M929A2, 5-ton dump truck for low-velocity airdrop on a type V airdrop platform (continued)

National Stock Number	Item	Quantity
	For lifting:	
1670-00-432-2507	16-ft (4-loop), type XXVI nylon webbing	2
	For suspension:	
1670-01-062-6306	3-ft (4-loop), type XXVI nylon webbing	
1670-01-062-6305	9-ft (4-loop), type XXVI nylon webbing	2
1670-01-063-7760	11-ft (2-loop), type XXVI nylon webbing	2
1670-00-432-6310	11-foot (4-loop), type XXVI nylon webbing	2
1670-01-064-4453	20-ft (4-loop), type XXVI nylon webbing	2
	For riser extensions:	
1670-01-062-6311	120-ft (2-loop), type XXVI nylon webbing	6
1670-00-040-8219	Strap, parachute release, multicut comes w 3 knives	2
	Suspension sling spreader:	
	Front:	
	Plywood, 3/4-inch	
5530-00-128-4981	2- by 12-inch	1
	Middle:	
	Lumber:	
5510-00-220-6248	2- by 12- by 66-in	2
5510-00-220-6274	4- by 4- by 94 1/2-in	1
	Rear:	
	Lumber:	
5510-00-220-6274	4- by 4- by 88	2
5510-00-220-6146	2- by 4- by 81	2
5530-00-128-4981	Plywood, 3/4- by 24- by 96-in	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	63
	Webbing:	
8305-00-268-2411	Cotton, type I, 1/4-inch cotton webbing	As required
8305-00-082-5752	Nylon, tubular, 1/2-in, 1,000-lb, natural	As required

GLOSSARY

ACB attitude control bar

AD airdrop

AFB Air Force base

AFR Air Force regulation

AFTO Air Force technical order

ATTN attention

CB center of balance

d penny

DA Department of the Army

DC District of Columbia

DD Department of Defense

diam diameter

EFTA extraction force transfer actuator

EFTC extraction force transfer coupling

FM field manual

ft feet

gal gallon

HQ headquarters

HDDS heavy drop derigging system

in inch

LAPE low-altitude parachute-extraction

LAPES low-altitude parachute-extraction system

lb pound

No number

NSN national stock number

OVE on-vehicular equipment

OVM operator vehicle maintenance

psi pound per square inch

TM technical manual

TO technical order

TRADOC United States Army Training and Doctrine Command

US United States

w with

yd yard

*U.S. GOVERNMENT PRINTING OFFICE: 1995 628-027/40007

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